INTERNATIONAL
Railway Journal

EDITORIAL INDEX

October 1960—December 1963

PROPERTY OF THE LIBRARY SIMMONS-BOARDMAN PUBLISHING CORP. 30 CHURCH ST. NEW YORK, N.Y.

SIMMONS-BOARDMAN PUBLISHING CORPORATION, 30 Church Street, New York, N. Y. 10007

63/65 Piccadilly, London, W.1

AUTHORS

Alemann, Roberto T., July 1961 p 25
Almquist, L., July 1963 p 41
Armand, Louis, Dec 1963 p 41
Arpaia, Anthony F., June 1961 p 25
Avetikian, Arshavir A., Mar 1961 p 24
Aydelott, J. C., May 1961 p 51

Baumgartner, J., Feb 1963 p 48
Beeching, Richard, May 1963 p 32
Beshchev, Boris P., Feb 1961 p 28
Bickers, D. H., Oct 1962 p 42
Bond, R. C., June 1961 p 33
Broughall, J. A., Dec 1961 p 50; Feb 1962 p 46
Brown, H. F., Feb 1962 p 47

Campbell, R. A., Apr 1962 p 23
Coultas, R. M., Feb 1962 p 39
Crofts, B. W. F., Feb 1961 p 50; Feb 1962 p 46
Cunliffe, J. P., Dec 1962 p 40

Day, John R., June 1962 p 64
Deshayes, M. P., Nov 1963 p 39
Desponds, R., Dec 1961 p 34

Eddy, W. C., Mar 1963 p 36

Farquharson, James, Feb 1963 p 49
Feio, Renato de Azevedo, May 1961 p 58

Gable, John L., Oct 1961 p 20
Garin, P. V., Jan 1963 p 28
Germain, Edmour, Apr 1963 p 24
Girod-Eymery, Henri, Mar 1962 p 50; Oct 1962 p 16
Gore, Gerhard W., Feb 1963 p 34

Halliday, Tereza L., Mar 1962 p 51
Harrison, John, June 1961 p 34
Heald, John A., Feb 1963 p 34
Hillbom, B., July 1963 p 41
Holmberg, Ake, Apr 1962 p 43
Hupkes, G., Apr 1961 p 54

Kawanabe, Hajime, Dec 1961 p 44; Dec 1962 p 26
Khachaturov, T., Sept 1963 p 42
Koch, Heinz, May 1961 p 58
Koster, J. P., Feb 1962 p 46

Lacoste, M. Louis, Jan 1963 p 38

Magee, G. M., July 1963 p 26
Mantoux, J., Aug-Sept 1961 p 56
Mikheyev, A., Dec 1963 p 44
Muller, Emil, Mar 1963 p 32

Nandkeolyar, Sri A., Apr 1961 p 15

Oeftering, Heinz M., Mar 1961 p 33; Aug 1962 p 22

Persson, P. O., Mar 1963 p 39
Pontual, Jose da Silveria, Feb 1961 p 11
Protopapadakis, P., June 1962 p 64

Ratter, John, Mar 1961 p 59
Roberts, W. K., May 1962 p 46
Russell, Donald J., Aug 1962 p 31

Sales, J. E., Feb 1963 p 48
Sanchez Diaz M., Raul, Mar 1963 p 30
Sasaki, Naoki, June 1962 p 46
Savidor, M., Sept 1963 p 32
Schmidt, J. J., Jan 1963 p 29
Sites, James N., Aug 1963 p 43
Sloth, Niels, Oct 1962 p 16
Smith, M. G. R., June 1961 p 36
Sogo, Shinji, Jan 1962 p 34; May 1962 p 46
Sonneville, M. Roger, Mar 1962 p 33
Suri, M. M., July 1961 p 21

Takada, Takao, June 1962 p 64
Tieleman, T., Apr 1961 p 54
Tyler, J. F. H., June 1961 p 37

Vincent, Warren J., Oct 1963 p 50

Walker, W., Mar 1962 p 51
Warder, S. B., June 1961 p 36
White, Sydney, Aug 1962 p 46

Zarzycki, J. M., Mar 1961 p 34

GENERAL INDEX

*Illustrated; †Letters to IRJ

A

AT & E Ltd.: Transistorized Signal Generator, Apr 1963 p 43*
Accident Prevention: Alertness Control Checks Driver, Aug 1963 p 54*
Actuator, Push-Pull Electric; Electric Actuator Co., Dec 1961 p 55*
Aerial Surveys:
  Pacific Northern Route, Jan 1961 p 56*
  Speed Railway Design and Location, Mar 1961 p 34*; Mar 1963 p 36*
Aerial Tramway in the Congo, Feb 1961 p 42*
Aero Controls, Ltd.: Flexible Couplings, June 1961 p 51*
Africa: (See also South Africa)
  RR Opportunities and Problems, Feb 1963 p 49
  RRs Proposed or Being Built, Sept 1962 p 24*
  West African Rys. Face Up to Trouble, Sept 1963 p 23*
African Railway Congress, First, Feb 1963 p 10, p 49
After Hours with Jim Lyne:
  Year 1961: Jan p 70; Feb p 62; Mar p 49; Apr p 62; May p 58; June p 58; July p 58; Aug-Sept p 58; Nov p 58; Dec p 58
  Year 1962: Jan p 58; June p 23; Aug p 47; Oct p 47; Dec p 53
  Year 1963: Oct p 3
Air Placement Equip. Co.:
  Concrete Placing Machine, Nov 1961 p 53
  Hydra-Jak Aids Soil Stabilization, Mar 1961 p 44
  Paint and Plaster Spray Gun, June 1961 p 51*
Air Reduction Sales Co., Inc.:
  Aluminum Electrode, Dec 1961 p 54
  Electronic Tracer, Apr 1962 p 50*
Air Rights:
  Examples of Developments, July 1963 p 39*
  Money-Making Asset, July 1963 p 36*
Airco Company International:
  Metal-Spray Process for Resurfacing, Jan 1961 p 55*
  New Welding Process, June 1961 p 50*
Alco Products, Inc.:
  Exhaust Manifold for Model 251 Engine, Mar 1963 p 53*
  Locomotive, Diesel-Electric 2400-Hp. DL 640, Oct 1961 p 55*
Alertness Control; Vapor Corp., Aug 1963 p 54*
Alsthom Company Electric Locomotive with Monomotor Trucks, June 1961 p 41*
Aluminum Covered Gondola Car in U.S., April 1961 p 44*
Aluminum Double-Deck Cars in Australia, Feb 1963 p 22*
Aluminum Electrode, Dec 1961 p 54
Aluminum Hopper Cars:
  Alumina Jamaica Ltd., Apr 1962 p 28*
  Aluminum Co. of America, for Use in Jamaica, Oct 1963 p 77*
  Pass Derailment Test, May 1961 p 28*
  Tank-Type; CNR, Aug 1962 p 50*
Aluminum Motor Cars; London Transport Executive, Jan 1961 p 28*
Aluminum Sets New Car Trends, Apr 1962 p 23*; Corrections, June 1962 p 641 and Aug 1962 p 461
Aluminum Shielding Protects Communications Cable In Hungary, Mar 1963 p 46
Aluminum Solder, Nov 1961 p 52
Aluminum Sub-Station, June 1962 p 59*
Aluminum Trains Built in Yugoslavia, July 1963 p 40*
Alweg Monorail for Seattle Century 21 Exposition, May 1961 p 54*; May 1962 p 24*
American Railway Progress Exposition, May 1963 p 45*; Aug 1963 p 17; Dec 1963 p 31
Amsler, A. J., & Co.:
  Track Inspection Laboratory, Oct 1961 p 54*; Jan 1962 p 50*
  Track Inspection Vehicle, July 1962 p 50*
Andrews Machine Co.: Augermobile Equipment for Unloading Box Cars, Jan 1962 p 50*
Angola: Benguela Ry. Modernizes Facilities, Apr 1963 p 38*; June 1963 p 11
Anti-Dust Services, Ltd.: Takdust Gel Coating, June 1963 p 47
Apprentice Training Program on Turkish State Rys., July 1961 p 44; Feb 1963 p 33
Argentina:
  Argentine State Rys.:
    Administrative Reorganization, Apr 1963 p 23
    Interview with R. T. Alemann, July 1961 p 25*
    Locomotives, Diesel-Electric, Aug 1962 p 50* (1420-Hp.); Jan 1963 p 22* (1300-Hp.)
    Purchasing Regulations, Apr 1963 p 9
    Rehabilitation of, Oct 1960 p 7; July 1961 p 25*; Aug-Sept 1961 p 42; Nov 1961 p 34*; Mar 1963 p 9; May 1963 p 10; Sept 1963 p 10
  Ferrocarril de Trocha Ancha, Four Lines Merged into, Apr 1962 p 8
  New Government's Policy Toward RRs, June 1962 p 9
  World Bank Rail and Highway Studies, Feb 1961 p 7; July 1962 p 11; Aug 1962 p 7; Oct 1962 p 22; Sept 1963 p 10
Arneke, Heinrich, & Co.: Tracklayer Tested on British Rys., Mar 1962 p 56*
Asia, Rail Lines Under Construction or Proposed in, Sept 1962 p 38*
Asian Railway Conferences:
  Founded by Shinji Sogo, Jan 1962 p 34*; May 1962 p 461
  Second, in Tokyo, Jan 1961 p 46*; Feb 1961 p 32*
  Third, in New Delhi, Jan 1962 p 36
Association of German Railway Engineers 1962 Permanent Way Convention, Exhibits at, May 1962 p 36*
Atlas Copco AB: Hand-Operated Tamper, Aug 1962 p 42*
Atomic Switch Lamp, Mar 1963 p 54*
Augermobile Equipment for Unloading Box Cars; Andrews Machine Co., Jan 1962 p 50*
Australia:
  Commonwealth Govt. Rys. Use of Radio, Apr 1961 p 21
  Flexi-Van Operation; Melbourne-Adelaide, June 1962 p 48*
  Gage Conversion Court Case, May 1961 p 11; May 1962 p 10
  Highway and Airline Competition in, Nov 1962 p 40
  Mt. Isa-Townsville Line in Queensland Rebuilt, Dec 1961 p 53*
Australia: (Continued)
  New South Wales Govt. Rys.:
    Aluminum Sets New Car Trends, Apr 1962 p 29*
    Automobile Traffic Increasing, Mar 1963 p 10*
    'Bulk Loading' Pays Off for, Nov 1962 p 39*
    Cars, Budd-RDC, Oct 1962 p 36*
    Cars, Double-Deck Aluminum, Feb 1963 p 22*
    Locomotives, 1800-Hp. Diesel-Electric, with AEI and Alco Equipment, Apr 1963 p 11*
    Luxury Trains Boost Travel, Feb 1963 p 42*
    Track Relaid in Woy Woy Tunnel, Oct 1961 p 34*
  Queensland Government Rys.:
    Construction Projects, Sept 1962 p 37*
    Rehabilitation Program Recommended, Oct 1962 p
  Railway Construction Under Way, May 1962 p 29*; Sept 1962 p 36*
  South Australian Govt. Rys.:
    Flexi-Van Operation, June 1962 p 48*
    Port Pirie-Broken Hill Gage Conversion, Jan 1961 p 70; May 1961 p 11; May 1962 p 10; Nov 1962 p 10; June 1963 p 11; July 1963 p 10
  Victorian Govt. Rys.:
    Car for Handling Bulk Flour, Jan 1962 p 20*
    Car, Freight; Largest Built by, June 1963 p 22*
    Car Truck Changing System, May 1962 p 10
    Flexi-Van Operation, June 1962 p 48*
    Freight Train, Heavy, Oct 1963 p 77*
    Improvement Program, Dec 1963 p 12
    Luxury Trains Boost Travel, Feb 1963 p 42*
  Western Australian Govt. Rys.:
    Kalgoorlie-Perth Gage Conversion, Jan 1961 p 70; May 1961 p 11, p 31*; Oct 1961 p 9; May 1962 p 10, p 29*; Sept 1962 p 36*; Dec 1962 p 7
    Passenger-Car Underframe Forms Base of Auto-Carrier, Oct 1960 p 38*
Austria:
  Austrian Federal Rys.:
    Capital Expenditures Planned, Apr 1961 p 55
    Container Service Offered by, Mar 1961 p 14
    Electrification Program, Dec 1963 p 12
    Locomotive, 1500-Hp. Diesel-Hydraulic, June 1961 p 36*
    Locomotive, 4850-Hp. Electric, July 1963 p 50*
    Radio, Use of, Apr 1961 p 20
    Springs, Rubber Disc, Sept 1963 p 54*
  Climatic Research Center in Vienna, Oct 1961 p 38*
  Locomotive, Converted Electro-Hydraulic, Jan 1963 p 6*
  M.W Exhibit at Innsbruck, May 1963 p 37*
  Monorail Planned for Vienna, Apr 1962 p 8
  Simmering-Graz-Pauker Railcars, Feb 1962 p 24*
Automated Train Operation:
  Crewless Ore Train in Canada, Nov 1962 p 24*
  General Electric Demonstration, May 1962 p 50*
  Germany Tests Radio-Controlled Switching Locomotives, Dec 1963 p 24*
  Hamburg Underground Studies, July 1961 p 32
  JNR Tokaido Line, July 1963 p 31
  London Subway Tests, June 1963 p 38*
  Rapid Transit Moves Toward; UITP Discussion, July 1963 p 41
  Stockholm Subway Tests, Apr 1963 p 46*
  Swedish State Rys. Railbus, Aug 1962 p 29*
  Swedish Underground Mine, Oct 1963 p 96

Automatic Train Control System; JNR Tokaido Line, Dec 1961 p 44*; Dec 1962 p 26*
Axle Testing at LTE Chiswick Laboratory, Feb 1961 p 24*

B

BICC-Bundy Ltd.: Thermoweld Process, Feb 1963 p 45*
Ballast Cleaners:
Hunslet Engine Co., Aug-Sept 1961 p 47*
Matisa (Materiel Industriel SA), Nov 1963 p 42*, p 44*
Plasser & Theurer, Sept 1963 p 37*, p 38*
Wieger Maschinenbau GmbH, May 1962 p 36*; May 1963 p 50*
Ballast Cleaning on the Baltimore & Ohio, Mar 1962 p 38*
Ballast Cribbing Machine, Matisa (Materiel Industriel SA), June 1962 p 60*
Ballast Distributor, Cleaning Attachment for; Ry. Maint. Corp., Jan 1961 p 54*
Ballast Regulators:
Kershaw Mfg. Co., Apr 1961 p 50*
Matisa (Materiel Industriel SA) June 1962 p 60*; Nov 1963 p 44*
Plasser & Theurer, Sept 1963 p 40*
Bar, Ribbed Reinforcing; United Steel Co., Ltd., June 1963 p 47
Barr & Stroud, Ltd.: Height and Stagger Gage, Nov 1961 p 52*
Battery Chargers, Rectifier; Electric Storage Battery Co., Apr 1962 p 50*
Baxenden Chem. Co., Ltd.: Polyurethane Frothed Foam, Aug 1963 p 48
Bearings:
Axle; Kugelfischer Georg Shafer & Co., Oct 1963 p 81*
Seamaster, in Millimeter Sizes, Jan 1963 p 47*
Tesnilka Synthetic-Fabric, July 1963 p 50
Belgium:
Belgian National Rys.:
Cars, Couchette, June 1962 p 40*
Equipment Modernization, May 1963 p 40*
Locomotives, Multi-Voltage Electric, July 1963 p 24*
Radio, Use of, Apr 1961 p 20
Liege Subway Plan, May 1962 p 10
Bergische Stahl Industrie: Switching Coupler, Apr 1963 p 43*
Bergman Borr AB: 'Pionjar' Has Many Railway Uses, Dec 1963 p 43*
Bogies (see Trucks)
Boiler, Circ-U-Latic Watertube; Vapor Corp., May 1963 p 50*
Bolivia Seeks Bigger Share in Control of La Paz-Arica Ry., Oct 1963 p 10
BoltMaster Machine; Ry. Maint. Corp., Mar 1961 p 41*
Bolton, Thomas, & Sons Ltd.: Commutator Copper Alloy, Dec 1961 p 54
Bosch, Robert, GmbH.: Hydraulic Cooling Unit, June 1963 p 47
Brakes:
Disc; British Rys. Test; Aug-Sept 1961 p 50*
Empty Load; Svebska AB Bromsregulator, Aug 1963 p 54*
Slip-Suppressing, Adapted for American Application, May 1961 p 48*
Braking System on Toronto Subway Cars, Nov 1962 p 30*
Brazil:
Brazilian RR Assn. Formed, Oct 1960 p 74
Central Ry. of Brazil; 4400-Hp. Electric Locomotives, Apr 1963 p 34*
Federal Rys.:
Cars, RDC Diesel Rail, Oct 1963 p 59*
Locomotives, U8B and U5B Diesel-Electric, Aug-Sept 1961 p 38*
Modernization Program, Oct 1963 p 58B
Pan American Railway Congress Held in, Jan 1961 p 46*; Feb 1961 p 11
Paulista Ry. Begins TOFC Service, Nov 1962 p 10
Paulista Ry. Plans Automatic CTC, Apr 1962 p 31*
'Railway Revolution' in, Oct 1963 p 58B*
Railways Order Passenger Cars, Oct 1961 p 29*
Rede Ferroviaria Federal Rail Cars, Oct 1962 p 50*
TOFC Developments in, Feb 1963 p 10
Vitoria-Minas Ry. Record Ore Run, Nov 1961 p 22
Bridges:
India Bridges the Brahmaputra, Aug 1963 p 25*
Links North-South Mexico, Feb 1963 p 41*
Bridgestone Tire Co., Ltd.: Neoprene Blended Air Springs, May 1963 p 51*
Bristol Siddeley Engines Ltd.: Mobile Power Station, Oct 1961 p 54*; Dec 1961 p 54*
British Electrification Conference Held in London, Jan 1961 p 46*
British Ermeto Corp., Ltd.: Range of Pipe Couplings and Valves, July 1961 p 49*
British Insulated Callender's Cables Ltd.: Insulating Spray, Apr 1963 p 43*
British Oxygen Co., Ltd.: Liquid Nitrogen Refrigeration, Dec 1963 p 43
British United Traction Ltd.: Diesel Engines, Oct 1960 p 49*; Nov 1961 p 53*
Brown Boveri & Cie.: Locomotive Simulator, July 1963 p 46
Bruce, E. L., Co., Inc.: Freight Car Flooring, Nov 1962 p 51*
Brush Cutter; Northwestern Motor Co., June 1963 p 46*
Bulgaria: Railway Expansion Program, Aug-Sept 1961 p 9

C

Cab Signal Device, JNR Improved, July 1962 p 16
Cable, Communications, Protected by Aluminum Shielding in Hungary, Mar 1963 p 46
Cable Threader; Explosive Power Tools, July 1962 p 50*
Calculators, Rail Curve; Matisa (Materiel Industriel SA), Mar 1961 p 41; Mar 1963 p 53*
Cambodia: Phnom Penh-Sihanoukville Line, June 1963 p 40*
Camera, Television; EMI Electronics Ltd., Oct 1962 p 46*
Canada:
Aluminum Sets New Car Trends, Apr 1962 p 28*
Canadian National Rys.:
Cars, Aluminum Tank-Hopper, Aug 1962 p 50*
EDP System in Use on, Oct 1961 p 19
Fare Plan Extended, Nov 1963 p 16
Great Slave Lake Line, Sept 1962 p 33*
Middle-Management Training School, Oct 1960 p 30*
Modernization Program, Feb 1961 p 48*
Radio, Use of, Apr 1961 p 21
Steadman Rail-Highway Container System, June 1961 p 48*
Train Services, Changes in, Nov 1963 p 16
Yard, Automatic, at Montreal, Feb 1962 p 35*
Canadian Pacific:
EDP System in Use on, Oct 1961 p 20
Radio, Use of, Apr 1961 p 21
Crewless Train; Iron Ore Co. of Canada, Nov 1962 p 24*
Montreal Subway Construction, May 1963 p 47*
Pacific Northern Line Mapped, Jan 1961 p 56*, July 1961 p 9
Quebec Cartier Mining Co. Line Construction, Jan 1961 p 26*; Feb 1961 p 501; Aerial Surveys, Mar 1961 p 36*
Toronto Subway Cars, Nov 1962 p 30*
Toronto Subway System, Dec 1963 p 18*
Wrecking Crane; Quebec Cartier Mining Co., Jan 1961 p 26*; Correction, Feb 1961 p 501
Cant Indicator; Taylor & Hubbard, Oct 1963 p 74
Capital Expenditures:
World Poll for 1961, Oct 1960 p 19; Jan 1961 p 19; Apr 1961 p 55
World Poll for 1962, Nov 1961 p 13; Dec 1961 p 58
World Poll for 1963, Nov 1962 p 42
World Poll for 1964, Nov 1963 p 24
Car Ferries (See Ferries)
Car Number Taker, Electronic; BTC, Jan 1963 p 34*
Car Pool in East Europe, June 1963 p 11; Aug 1963 p 10; Oct 1963 p 37
Car Puller, Strachan & Henshaw, Jan 1963 p 46*
Car Retarder, Telefunken GmbH Electronic, Feb 1962 p 43*
Car Tipper for Use in Liberia, Oct 1962 p 50*
Car Washing Plants, German, on British Rys., June 1961 p 43*
Carel Fouche & Cie: Stainless-Steel Passenger Car for French National Rys., Nov 1961 p 52*
Cars, Freight:
Aluminum, Trends in, Apr 1963 p 23*
Auto-Carrying:
French Nat. Rys., June 1961 p 14*
Italian State Rys., Feb 1962 p 32*
Svenska Jarnvagsverkstaderna; Oct 1963 p 96
Western Australian Govt. Rys., Oct 1960 p 38*
Box:
British Rys.:
For Palletized Freight, Nov 1961 p 14*
For Use in Europe, Dec 1962 p 18*
Laminated Plywood, Dec 1962 p 18*
CB&Q Foam-Insulated, June 1963 p 44*
Container:
German Federal Ry., Oct 1963 p 79*
Italian State Rys., Feb 1962 p 34*
Dump; Netherlands Rys., May 1963 p 21*
Flat:
Auto-Porter Introduced in U. S., Apr 1961 p 44*
Flexi-Van, in Australia, June 1962 p 48*
German Fed. Ry., Developments on, Mar 1961 p 28*
Gondola; North American Car Corp. Covered Aluminum, Apr 1961 p 44*
Hopper:
Aluminum, in Jamaica, Apr 1962 p 28*; Oct 1963 p 77*
Aluminum, Pass Derailment Test, May 1961 p 28*
CNR Aluminum Tank-Type, Aug 1962 p 50*
Italian State Rys., for Minerals, Feb 1962 p 34*
Netherlands Rys., for Bulk Traffic, Apr 1961 p 37*
Side-Discharging; Talbot Waggonfabrik, Dec 1962 p 58*
Swedish State Rys., for Iron Ore, Nov 1962 p 45*
Victorian Govt. Rys., for Bulk Flour, Jan 1962 p 20*
Japanese, Exhibited at Second Asian Railway Conference, Jan 1961 p 51*; Feb 1961 p 35*
Liquid Pig Iron, in Germany, Oct 1961 p 16*
Lumber; Congo-Ocean Ry., Oct 1963 p 91
Open-Top:
Bulky Freight; Italian State Rys., Feb 1962 p 33*
Folding Roof; MacGregor-Comarain SA, Aug 1963 p 31*
Folding Roof; Schindler Wagon, Apr 1963 p 42*
Movable Body Halves; German Fed. Ry., June 1962 p 34*
Overhead Roll Door; Italian State Rys., Feb 1962 p 31*
Side-Swinging Roof, Italian State Rys., Feb 1962 p 30*
Q51 18-Axle; Swedish State Rys., Jan 1962 p 25*
Refrigerator:
Development of Mechanical Refrigeration in U. S. A., Oct 1960 p 24*
Europe to Test Giffo Cars, Mar 1963 p 39*
French Nat. Rys.; Societe des Etablissements Cadoux, May 1963 p 50*
French Nat. Rys. Tests Nitrogen Cooling, Nov 1963 p 16
Italian State Rys., Feb 1962 p 31*
Self-Propelled Container and Box, in Japan, Jan 1961 p 51*; Feb 1961 p 35*
Self-Unloading; Polish State Rys., Jan 1962 p 48
Silo; Italian State Rys., Feb 1962 p 34*
Tank:
Esso Petroleum Co., Ltd., May 1963 p 21*
New Zealand Govt. Rys. Insulated, Oct 1963 p 79*
New Zealand's Largest, May 1962 p 44*
Plastic; Developed in U. S., Sept 1963 p 48*
Transformer, 24-Axle, in Japan, Feb 1961 p 35*
Cars; Freight; (Continued)
Well-Type, Large; Victorian Govt. Rys., June 1963 p 22*
Cars, Passenger; (See also Trainsets)
Aluminum Sets New Trends in, Apr 1962 p 23*; Correction, June 1962 p 641; Aug 1962 p 461
Belgian Nat. Rys. Couchette, June 1962 p 40*
Belgian Nat. Rys. Modernizes, May 1963 p 43*
Brazilian Rys., Oct 1961 p 29*; Diesel Rail, Oct 1963 p 59*
British Rys. Design Panel Report, Apr 1963 p 36*
French National Rys. Stainless Steel, Nov 1961 p 52*
Hellenic State Rys. Diesel Rail, Mar 1962 p 22
India Builds Its Own Coaches, June 1961 p 44*
Jamaica Ry. Diesel-Hydraulic Rail, Aug 1962 p 38*
Japanese, Exhibited at Second Asian Railway Conference, Feb 1961 p 32*
JNR Diesel Rail, Aug-Sept 1961 p 32*
JNR Electric Railcar Designs, Oct 1960 p 34*
JNR Tokaido Line Test Units, July 1963 p 28*
Kei-Han-Shin Constant Speed Commuter, Feb 1962 p 20*; Correction, June 1962 p 641
Kowloon-Canton First-Class, Feb 1963 p 22*
Levacars and Individual Capsules Previewed at Seattle World's Fair, Aug 1962 p 35*
London Transport Executive Aluminum Motor, Jan 1961 p 28*; Subway, Aug 1962 p 50*
New South Wales Govt. Rys. Budd RDC's, Oct 1962 p 36*; Double-Deck Aluminum, Feb 1963 p 22*
Packaged Knock-Down Units Planned by Budd Co., Sept 1963 p 51
Rack; Manitou & Pike's Peak Ry., Nov 1963 p 54*
Rubber-Tired; Montreal Subway; May 1963 p 47*
Simmering-Graz-Pauker of Austria Diesel-Hydraulic Rail, Feb 1962 p 24*
Swedish State Rys. Flexible Buffet, Jan 1961 p 31*; First and Second Class, Jan 1962 p 24*
Tokyo Express Ry. Commuter, Oct 1962 p 31*
Tokyo Underground Stainless Steel, May 1961 p 53
Toronto Transit Comm. Subway, Nov 1962 p 30*
Cars, Special:
Dynamometer; British Rys., July 1961 p 39*
Electronic Inspection; Simmering-Graz-Pauker, Apr 1963 p 42*
Gangers' Railcar; Robel & Co., Apr 1963 p 42*
Motor-Generator Sets; Swedish State Rys., May 1963 p 46*
Catch Pit Covers; Dexion Ltd., Sept 1962 p 43*
Caterpillar Tractor Co.:
D7E Tractor, Mar 1962 p 55*
Tractor-Scrapers, Mar 1961 p 40*
Centralized Traffic Control:
Computer Simulation of CTC Dispatcher, Oct 1961 p 20*
Danish State Rys., Oct 1961 p 42*
Netherlands Rys., Oct 1961 p 32*
Paulista Ry., Apr 1962 p 31*
Rhodesian Rys., Nov 1961 p 42*; Oct 1962 p 22
Swedish State Rys., Jan 1962 p 29*
Ceylon; 600-Hp. Diesel-Hydraulic Locomotives for Colombo Port Comm., July 1963 p 34*
Chain Roller Dri-Loob; Spray Prod. Corp., Oct 1961 p 55*
Channel Tunnel Project (See English Channel)
Chemetron Corp., Nat. Cylinder Gas Div.: Track Inspection Car, Oct 1961 p 54*
China:
All-Woman Rail Crew, Oct 1960 p 10
Electrification Projects, Jan 1961 p 62*
Fifteen-Year Rail Plan, Apr 1963 p 24*
Local Railway Network Expanded, Apr 1961 p 60
Locomotives, 6000-Hp. Electric, Jan 1961 p 62*
Rail Lines Built or Projected, Jan 1961 p 7; Apr 1963 p 30
Results in 1959; Outlook for 1960, Feb 1961 p 7
Tree Belt Protects Desert Rail Line, Mar 1963 p 30
Chittaranjan Locomotive Works, India, Expands Production, May 1962 p 38*
Chrome Plating to Prevent Engine Wear, Nov 1961 p 33*
Clayton Mfg. Co.: Steam Cleaner, Jan 1963 p 47*
Cleaning Equipment and Processes:
Car Washing Plants; British Rys., June 1961 p 43*
Rotary Cleaner; P. Von Arx & Co., Sept 1962 p 42*
Steam Cleaner; Clayton Mfg. Co., Jan 1963 p 47*
Tank Cleaner; Sellers Injector Corp., Feb 1963 p 45*
'Tramway' Aids Small-Part Tank-Cleaning; Magnus Chemical Co., June 1961 p 51*
Climatic Research Center in Vienna, Oct 1961 p 38*
Coachscrewing Machine, Stumec-Geismar, Feb 1963 p 45*
Coal Delivery Yard; British Rys., Feb 1963 p 22*
Coating Sprayed on Alco Locomotives, July 1962 p 18*
Coatings:
Insulating Spray; British Insulated Callender's Cables Ltd., Apr 1963 p 43*
Self-Renewing Dust Trap; Anti-Dust Services, June 1963 p 47
Cobham, Alan, Eng. Ltd.: Level Indicator, Oct 1963 p 74*
Collins Radio Co.: Transistorized Microwave Carrier, Nov 1961 p 53*
Colombia:
National Rys.:
Atlantic Ry. Completed, Aug-Sept 1961 p 48*
Plans for Upgrading, Aug-Sept 1961 p 49; World Bank Loan, July 1963 p 10; Oct 1963 p 60
Communications System, Hungary Improves, Mar 1963 p 46
Commutator Copper Alloy; Thomas Bolton & Sons, Dec 1961 p 54
Commutator Undercutter, Peerless DS, Nov 1961 p 28*
Competitive Transportation:
Asian Rys. Conference Discusses, Jan 1962 p 36
Highways vs. Railways in Australia, Nov 1962 p 40
Opportunities and Problems in Africa, Feb 1963 p 49
Study Made by J. M. Sites, Aug 1963 p 43
West African Rys. Face Up to Trouble, Sept 1963 p 23*
Compressor, Impact Wrench; Hymatic Eng. Co., Jan 1962 p 50*
Computers (See Electronic Data Processing)
Concrete Placing Machine; Air Placement Equip. Co., Nov 1961 p 53
Concrete Ties (See Ties)

Congo:
COMILOG Line, Feb 1961 p 42*; Nov 1962 p 45*
Congo-Ocean Ry. Solves Lumber Car Maintenance and Cost Problem, Oct 1963 p 91
Construction Projects:
Africa: New Railways for New Nations, Sept 1962 p 24*
Australia Launches New Lines, May 1962 p 29*; Sept 1962 p 36*
Australia Rebuilds Mt. Isa-Townsville Line, Dec 1961 p 33*
Chihuahua-Pacific Ry., Mexico, Jan 1961 p 32*; Jan 1962 p 54; Nov 1962 p 44*; Oct 1963 p 44*
China Draws Up Rail Plans, Apr 1963 p 24*
COMILOG Line, Congo, Feb 1961 p 42*; Nov 1962 p 45*
Great Slave Lake Line, Canada, Sept 1962 p 33*
Iranian State Rys., Oct 1960 p 42*
JNR Tokaido Line, July 1963 p 26*
MIFERMA Line, Mauritania, Oct 1960 p 73; Dec 1962 p 36*
Montreal Subway, May 1963 p 47*
New Rails Pace Asia's Growth, Sept 1962 p 38*
Phnom Penh-Sihanoukville Line, Cambodia, June 1963 p 40*
Plans to Link Turkish and Iranian Rys., Oct 1960 p 10; Mar 1961 p 45*
Tanganyika Central's Kilombero Valley Branch, Jan 1961 p 42*
Vogelfluglinie in Europe, Sept 1962 p 34*; Aug 1963 p 49*
Container Service:
British Liner Train Proposals, May 1963 p 34
Canada Tests Steadman System, June 1961 p 48*
Soviet Rys. Developments, Jan 1962 p 32
Tasmania Starts Searail Service, Nov 1961 p 26*
World Poll on, Mar 1961 p 14*
Containers:
Bulkrane System for Handling, Nov 1962 p 58*
Dipping Basket; Jones & Laughlin, Apr 1962 p 50*
International Standards, Tentative Agreement on, June 1962 p 9
Prefabricated Plastic; Werkspoor, N. V., Aug 1963 p 54
Standards in U. S. A., Feb 1963 p 46
Swedish State Rys., Aug 1962 p 29*
Control Panels, Unit-Constructed; Integra; Henry Williams, Ltd., Nov 1962 p 51*
Control System, Constant-Speed, for Japanese Commuter Cars, Feb 1962 p 20*
Cooling Unit, Hydraulic Drive for; Robert Bosch GmbH, June 1963 p 47
Coordination of Transportation:
Asian Rys. Conference Discusses, Jan 1962 p 36
Beeching, Richard, on, Jan 1962 p 19
Coseley Buildings Ltd.: Aluminum Sub-Station, June 1962 p 59*
Costing for Rates in Britain, Oct 1962 p 42
Couplers, Switching:
Bergische Stahl Industrie, Apr 1963 p 43*
Scharfenbergkupplung, Nov 1961 p 52
Couplings, Flexible; Aero Controls Ltd., June 1961 p 51*
Cowans Sheldon & Co., Ltd.: Wrecking Crane, Nov 1961 p 53; Correction, Feb 1962 p 461
Craig, John S., & Co.: Gelled Primers, Nov 1961 p 53
Cranes:
Bulkrane Tests on British Rys., Nov 1962 p 58*
Discharger and Slewing Unit; Grant, Lyon & Co., Dec 1963 p 43*
I&N Moves Track Panels with, Mar 1963 p 66*
Maintenance of Way; Cullen-Friestedt, June 1961 p 50*; Mar 1962 p 54*
Mobile; MAN AG, May 1963 p 51*
Mobile; Metro-BPG-Cammell, Apr 1963 p 43*
Mobile; Ransomes & Rapier, Oct 1960 p 48*
Piggyback Handling; Drott Mfg. Corp., Oct 1961 p 55*
Wheel Handling; Eng. Equip. Co., Apr 1961 p 51*
Wrecking; Cowans Sheldon & Co., Nov 1961 p 53; Correction, Feb 1962 p 461
Wrecking; Quebec Cartier Mining Co., Jan 1961 p 26*; Correction, Feb 1961 p 501
Crompton Parkinson Ltd.: 175-Hp. Tractor Motor, Oct 1960 p 49*
Crossing Frogs, Welded, Cut Maintenance Costs, Mar 1963 p 32*
Crossings, Highway Grade:
Radio-Active Device to Activate Warning Signal Tested in Japan, Oct 1961 p 37
Transistorized Level Crossing System; Pintsch Bamag AG, July 1961 p 48*; Correction, Aug-Sept 1961 p 56
Crossties (See Ties)
Cullen-Friestedt Co.:
Ditcher Converts to Crane, Apr 1961 p 50*
M/W Cranes, June 1961 p 50*; Mar 1962 p 54*
Cutoff Machine, Oscillating Attachment for; Stone Machinery Co., May 1963 p 51*
Cutter Profile Developer; Thomas Robinson & Son, Dec 1961 p 55
Czechoslovak State Rys.:
Locomotive Designs, New, Nov 1961 p 16*
Locomotive, 2000-Hp. Diesel-Electric, Nov 1962 p 45*
Trainsets, Diesel-Mechanical, Nov 1962 p 44*; Correction, Feb 1963 p 481
Trainsets, Suburban Electric, Jan 1961 p 52*

D

Daimler-Benz AG.: 350-750-Hp. Diesel Engines, Oct 1962 p 46*
Danish State Rys.:
Car Ferry "Arveprins Knud", Dec 1963 p 12
CTC Modernization, Oct 1961 p 42*
Container Service, Mar 1961 p 14
Locomotives, 1950-Hp. Diesel-Electric, Performance of, Apr 1963 p 10*
'Lyntog' Trains Speed Ferry Transfer, June 1963 p 42*
Minimum Crew Requirements, Oct 1962 p 161
Vogelfluglinie Construction, June 1962 p 34*; Sept 1962 p 34*; Completed, Aug 1963 p 40*
Davies & Metcalfe: Drain Valve for Brake Piping, Oct 1963 p 81*
Depots (See Shops)
Derails and Stands, Nolan Hinged and Sliding, Mar 1962 p 55
Detector, Presence; Gen. Ry. Signal Co., July 1962 p 50*
Dexion Ltd.: Catch Pit Covers, Sept 1962 p 43*
Digitronics Corp.: High Speed Data Transmission System, July 1961 p 48*
Ditcher Converts to Crane; Cullen-Friestedt Co., Apr 1961 p 50*
Door Gears, Sliding, for Yugoslavian Box Cars; P. C. Henderson, Ltd., May 1963 p 50*
Drill and Saw Maintenance Unit; Racine Hydraulics & Machy., Dec 1961 p 55*
Drott Mfg. Corp.: Travelift Crane for Piggyback Handling, Oct 1961 p 55*
Duff-Norton Spring Testing Machine, Apr 1962 p 50*
Dunedin Eng. Co., Ltd.: Tester for Diesel Injection and Fuel Systems, Jan 1961 p 55*; Indicator Records Diesel Firing Pressure, Feb 1961 p 51
Du Pont de Nemours International SA:
Neoprene for Air Springs, May 1963 p 51*; Sept 1963 p 54*
Neoprene for Subway Door Seals, Oct 1962 p 46*
Weed-Killer Compound, Mar 1962 p 54
Dust Trap, Self-Renewing; Anti-Dust Services, June 1963 p 47
Dynamometer Car for British Rys., July 1961 p 39*

E

EMI Electronics Ltd.:
Push-Button Switches, Oct 1963 p 85*
Robot Tractors, Feb 1962 p 43*
Television Camera, Oct 1962 p 46*
East African Rys. & Harbours: (See also Kenya, Tanganyika and Uganda)
Container Service, Mar 1961 p 14
Lines Under Construction, Sept 1962 p 30*
Radio, Use of, Apr 1961 p 21
East Europe Forms Freight Car Pool, June 1963 p 11; Aug 1963 p 10; Oct 1963 p 37
Edison, Thomas A., Ind.: Voltage Regulator, Oct 1963 p 85*
Egger, Emile, & Co., SA: Iris Diaphragm Valves, Aug 1963 p 54
Egypt:
Five-Year Railway Plan, Jan 1961 p 39*
Subway Construction Studied, June 1963 p 9
Ejector, Giesl; Schoeller-Bleckmann Steel Works, Sept 1962 p 43*
Electric Actuator Co., Ltd.: Push-Pull Electric Actuator, Dec 1961 p 55*
Electric Storage Battery Co.: Rectifier Charger, Apr 1962 p 50*
Electrification:
Belgian National Rys., May 1963 p 40*
British Rys. AC Conversion, Jan 1961 p 50*; Dec 1961 p 50*; Correction, Feb 1962 p 461
BTC Conference in London, Jan 1961 p 46*
Chinese Rys. AC Projects, Jan 1961 p 62*
French National Rys., Nov 1963 p 34*
Indian Rys.: Progress Reports, Apr 1961 p 17*; Oct 1963 p 77*
Italian State Rys., June 1961 p 18*
Planning for 25-kv Traction, Apr 1961 p 15*
South African Rys., Apr 1961 p 52; Feb 1962 p 44
Soviet Rys., Apr 1961 p 43; Nov 1961 p 55; Jan 1962 p 30*
Spanish National Rys., Feb 1961 p 14*
Status in European Countries, July 1963 p 15
Turkish State Rys., Nov 1961 p 44*
Electro Mechan-Heat Ltd.: Spot-Welding Machines, Jan 1961 p 54*
Electronic Car Retarder, Feb 1962 p 43*
Electronic Data Processing: (See also Automated Train Operation)
Aerial Mapping, Mar 1961 p 34*
Growth in RR Use of, Oct 1961 p 18*; Correction, Mar 1962 p 511
ILO Surveys RR Use of, July 1961 p 29
Mitsubishi Electric Control Computer, Dec 1962 p 58*
Solving Wheel Problems, June 1963 p 50
Electronic Freight Car Number Taker Developed by BTC, Jan 1963 p 34*
Electronic Inspection Cars, Apr 1963 p 42*
Electronic Interlocking; British Rys., Feb 1961 p 58*; Feb 1963 p 34*
Electronic Tracer, Apr 1962 p 50*
Electronic Track Circuit, Apr 1963 p 42*; Oct 1963 p 85
Electronic Track Surfacer, July 1961 p 48*
Electronic Tractor, Feb 1962 p 43*
Employees:
ILO Looks at Effect of Rail Modernization on, July 1961 p 27*
Manila RR Profit Sharing Plan, Feb 1961 p 49
Minimum Crew Requirements in Denmark, Oct 1962 p 161
One-Man Crews in The Netherlands, Feb 1962 p 461; Apr 1963 p 50
Psychotechnical Advising, Feb 1961 p 11
Engineering Equip. Co.: Crane for Railway Wheels, Apr 1961 p 51*
Engines, Diesel:
British United Traction 15 Liter, Nov 1961 p 53*
British United Traction 275-Hp., Oct 1960 p 49*
Daimler-Benz AG, 350-750-Hp., Oct 1962 p 46*
Hawker Siddeley Brush International 1600-Hp., Oct 1960 p 49*
Maschinenfabrik Augsburg-Nurnberg AG Underfloor, Feb 1962 p 43*
Mitsubishi Nippon Heavy Ind. 3000-Hp., Aug 1962 p 42*
Rolls-Royce 400-700-Hp., Feb 1963 p 44*
Sulzer Bros. High-Powered LVA, Aug 1962 p 42*; 2750-Hp., Jan 1963 p 46*
Engines, Gas; Rolls-Royce, Apr 1962 p 38*
English Channel Bridge Proposed in France, Oct 1961 p 9
English Channel Tunnel Project, Dec 1961 p 42*; May 1962 p 10; June 1962 p 9; Nov 1962 p 46; July 1963 p 44; Oct 1963 p 101; Dec 1963 p 41
English Electric Co., Ltd.: Elapsed Time Meter, Dec 1961 p 55
Ericcsons Signalaktiebolag, L. M.: Automatic Traingraph, Oct 1960 p 48*
Euro-Commerz Speed-Detector and Recorder, Feb 1962 p 43*
Eurofima:
Annual Report for 1962, Aug 1963 p 10
Portuguese Ry. Cars Financed, Mar 1963 p 23; June 1963 p 13
To Increase Capital Stock, Apr 1962 p 8
U. S. Bank Loan, Oct 1962 p 13
Europe:
Advanced Education Center for European Railway Personnel Holds First Course, May 1963 p 52*
Cities Turn to Transit Planning, Jan 1963 p 12
Climatic Research Center, Vienna, Oct 1961 p 38*
Future of Railways; L. Armand on, Dec 1963 p 41
Passenger Fares Vary Widely, June 1963 p 53
Rail-Air-Rail Service, June 1961 p 7
RRs Seek to Improve Passenger Service, Mar 1961 p 7
Report from, by Dr. H. M. Oeftering, Aug 1962 p 22*
IRJ Correspondents, July 1963 p 15
TEE Service, Mar 1961 p 22*; Aug-Sept 1961 p 36*
TEEM Service, Dec 1961 p 23*
Train and Schedule Changes, Jan 1962 p 13
Train Speeds in, Aug 1962 p 48
European Economic Community: Transport and Rate Policy, Dec 1961 p 20*; Feb 1962 p 10; July 1962 p 11; Aug 1962 p 10; Jan 1963 p 12, p 42; July 1963 p 15; Aug 1963 p 10
Exhaust Manifold; Alco Prod., Mar 1963 p 53*
Exhibits:
American Railway Progress Exposition, May 1963 p 45*; Aug 1963 p 17; Dec 1963 p 31
Asian Railway Conference (Second) in Tokyo, Jan 1961 p 46*; Feb 1961 p 32*
British Electrification Conference in London, Jan 1961 p 46*
International Exhibition of Transport and Communications to be Held in Munich in 1965, June 1963 p 54
Maintenance of Way in Elst, Feb 1961 p 49; Mar 1961 p 38*; May 1961 p 19*; Correction, June 1961 p 56
Maintenance of Way, in Innsbruck, May 1963 p 37*
Pan American Railway Congress in Brazil, Jan 1961 p 46*
Explosive Power Tools Ltd.:
Cable Threader, July 1962 p 50*
Floorboard Lifter, Dec 1961 p 55*
Export Business, Hungarian RR Supply Industry Anticipates, Dec 1963 p 7, p 35*
Express Freight Service Pays Off in Australia, Nov 1962 p 39*

F

FMA Pokorny Riveting Hammer, June 1963 p 46*
FWD Wagner, Inc.: Lift Truck for TOFC Loading, June 1962 p 59*
Fairmont Ry. Motors, Inc.:
Gang Car, Medium Duty, Jan 1962 p 50*
Hy-Rail Equipment for Bus, Aug-Sept 1961 p 47*
Spike Driver, Apr 1961 p 51*
Spike-Puller, Oct 1960 p 49*
Fares, European, Vary Widely, June 1962 p 53
Feedback Ltd.: Wave-Form Generator for Servo Testing, June 1961 p 50*
Ferries:
Car Ferry "Arveprins Knud"; DSR, Dec 1963 p 12
Passenger Ferry "Avalon"; BR, Oct 1963 p 79*
Rail-Road Ferry "Aramoana"; NZ, Jan 1962 p 21*
Tasmania Searail Service, Nov 1961 p 26*
Trans-Caspian Car Ferry, Mar 1961 p 24*
Ferry Terminals; Danish-German Vogelfluglinie, Aug 1963 p 40*
Finnish State Rys.:
Cars, Passenger, Oct 1961 p 17*
Electrification Proposed, Jan 1963 p 12
Locomotives, 2800-Hp. CC Diesel-Electric, Jan 1963 p 33*
Radio, Use of, Apr 1961 p 21
First Crewless Freight Train, Nov 1962 p 24*
Fish Plates:
Densified Wood; Permali Ltd., Mar 1962 p 55
Emergency; Henry Williams, Ltd., Mar 1961 p 44
Flexible Drives (Gilmans) Ltd.: Rail Grinders, Mar 1962 p 55*; Jan 1963 p 47*
Flexi-Van Service in Japan, Dec 1961 p 19*
Flexi-Vans Speed Australian Freight, June 1962 p 48*
Floorboard Lifter; Explosive Power Tools, Dec 1961 p 55*
Flooring, Freight Car; E. L. Bruce Co., Nov 1962 p 51*
Foam, Polyurethane Frothed; Baxenden Chem. Co., Ltd., Aug 1963 p 48
France:
Alsthom Company Electric Locomotive with Monomotor Trucks, June 1961 p 41*
Channel Bridge Proposed, Oct 1961 p 9
Channel Tunnel Project, Dec 1961 p 42*; May 1962 p 10; June 1962 p 9; Nov 1962 p 46; July 1963 p 44; Oct 1963 p 101; Dec 1963 p 41
French National Rys.:
Car, Double-Deck Auto-Carrier, June 1961 p 14*
Car, Refrigerator, May 1963 p 50*
Car, Refrigerator, Uses Nitrogen, Nov 1963 p 18
Car, Stainless-Steel Passenger, Nov 1961 p 52*
Cars, Passenger, for Express Service, Apr 1963 p 10*
EDP Gamma 60 System, Oct 1961 p 18*
Locomotive Development, Nov 1963 p 33*
Locomotive, AC-DC Electric, Mar 1962 p 28*
Locomotives, Multi-Voltage Electric, July 1963 p 24*
Masterpiece in RR Technology, Nov 1963 p 32*
Rate Structure Modernized, Jan 1963 p 38*
Roll-Back Freight Car Roof, Aug 1963 p 31*

France: (Continued)
French National Rys.: (Continued)
Seeks Passenger Fare Increase, June 1963 p 19
To Build Office Building, Oct 1960 p 7
Trains, 425-Hp Autorail, July 1963 p 21*
Trainsets, Three-Car Electric, July 1961 p 46*; Aug-Sept 1961 p 56‡
Trainsets, Two-Car Diesel, Aug 1963 p 36*
Railway Supply Industry Plans, Nov 1963 p 36*
Ties, Concrete, Mar 1962 p 36*, p 37*, p 50* ‡
UIC Headquarters Building, Feb 1963 p 22*
Freight Car Loading: 'Bulk Loading' Pays Off for New South Wales Govt Rys., Nov 1962 p 39*
Freight Handling:
Augermobile for Unloading Box Cars, Jan 1962 p 50*
Good Planning Keeps Rotterdam Freight Moving, Jan 1961 p 22
How to "Land" a Locomotive, Oct 1962 p 45*
Freight Service:
Express Service Pays Off in Australia, Nov 1962 p 39*
Shippers Polled on RR Service, June 1961 p 16
TEEM Trains Slash Delivery Times, Dec 1961 p 23*
Frogs:
One-Piece Switch; Hadfields Ltd., Mar 1961 p 40*
Welded Crossing; Pintsch Bamag Aktiengesellschaft, Mar 1961 p 41*
Frozen Foods, Gffo Refrigerator Car for, Mar 1963 p 39*
Fuel Cells:
Source of Locomotive Power, Feb 1962 p 42
Under Development in Sweden, Sept 1963 p 21
Fuel Control for Diesels on Steep Grades; Southern Ry. of Peru, Feb 1962 p 29*
Fuel Storage Tanks; Pennsylvania RR, Nov 1961 p 25*

G

Gage-Changing Devices; USSR, Sept 1963 p 21; Spain, Oct 1963 p 96
Gage, Height and Stagger; Barr & Stroud, Nov 1961 p 52*
Gandy-Wagen Road/Rail Car; H. A. Kampmann, Feb 1963 p 44*
Gang Cars:
Fairmont Ry. Motors, Jan 1962 p 50*
Wickham, D., & Co., Apr 1961 p 51*
Gantries, Secmafer Track Relaying, Feb 1963 p 45*
Gas-Producer Plant at Koedoespoort; South African Rys. & Harbours, Feb 1961 p 38*
Gearbox, De Dietrich Eight-Speed, Aug 1963 p 38*
General Electric Co.:
Locomotives, U25B, for UP, Jan 1962 p 21*
Locomotives, U25B, New Look for, Apr 1962 p 46*
Semi-Automatic Spot Welding, Dec 1961 p 54*
Valve, Magnetic, Has Encapsulated Coil, July 1961 p 49*
General Railway Signal Co.: Presence Detector, July 1962 p 50*
General Steel Ind., Inc.: Lightweight Passenger-Car Truck, Oct 1961 p 54*
Generators:
Mobile; Bristol Siddeley Engines, Oct 1961 p 54*; Dec 1961 p 54*
Portable Electric, for Ballast Tampers; Kango Elec. Hammers, Jan 1961 p 55*
Wave-Form, for Servo Testing; Feedback, June 1961 p 50*
Germany:
Aluminum Sets New Car Trends, Apr 1962 p 26*
East Germany:
Car and Locomotive Production, Mar 1962 p 24*
German State Ry.:
Locomotives, Multi-Purpose Electric, Mar 1962 p 24*
Locomotives, V180 Diesel-Hydraulic, May 1961 p 35*
Train, Streamlined Diesel Express, Aug 1963 p 39*
Report from Berlin, Aug 1962 p 40*
West Germany:
Bridge at Coblence, Dec 1961 p 19*
Cars, Liquid Pig Iron, Oct 1961 p 16*
Frankfurt Subway Started, Dec 1963 p 23
German Federal Ry.:
"Auto-in-Train" Service, Feb 1961 p 55
Cars, Piggyback Container, Oct 1963 p 79*
Chrome Plating to Prevent Engine Wear, Nov 1961 p 33*
Container Service, Mar 1961 p 14
Generator, 118-Ton, Handled, Jan 1963 p 6*
High-Speed Train Tests, Nov 1963 p 53
How Track is Rebuilt, Mar 1963 p 27*
IBM Data Processing Equipment, Oct 1961 p 18*
Locomotive Developments, Sept 1963 p 21
Locomotive, Electric, for Rheingold Express, July 1962 p 44*
Locomotive, 4000-Hp Diesel-Hydraulic, Apr 1963 p 10*
Modernization Program, Mar 1961 p 26*; June 1962 p 32*
128th Year: Problems and Promises, Mar 1961 p 32*
Plastic Train Tested, Jan 1963 p 25*
Radio, Use of, Apr 1961 p 21
Rheingold Express Modernized, July 1962 p 43*
Track Improvements Planned, Oct 1962 p 24
Training of M/W Employees, June 1962 p 38
Vogelfluglinie Construction, June 1962 p 34*; Sept 1962 p 34*; Completed, Aug 1963 p 40*
Weighbridge, Automatic, July 1962 p 48
Hamburg Underground Tests DT 2 Trainsets; Studies Train Automation, July 1961 p 32*
Henschel-Werke Trains Engineers from Under-Developed Countries, Apr 1961 p 35*
Locomotive, Henschel-Werke 2000-Hp Diesel-Electric, Nov 1962 p 45*
Locomotive Simulator Developed, July 1963 p 46
Locomotives, Switching, New Concepts in, July 1961 p 34*
Pintsch-Bamag Methods of Welding Frogs, Mar 1963 p 32*
Pipe, Long, Handled by Rail, Jan 1962 p 21*
Radio-Controlled Switching Locomotives Tested, Dec 1963 p 24*
Germany: (Continued)
West Germany: (Continued)
Ties, Concrete, Use of, Mar 1962 p 36*
Transport and Communications Exhibit to be Held in Munich in 1965, June 1963 p 54
Wuppertal Monorail Trainsets, July 1963 p 33*
Ghana Ry. & Harbours: Improvements Needed to Keep Pace with Highway Growth, Sept 1963 p 30*
Gloucester Ry. Carriage & Wagon Co., Ltd.: Rubber-Sprung Freight Car Truck, Dec 1963 p 54*
Government Transportation Policies, J. M. Sites on, Aug 1963 p 43
Grant, Lyon & Co., Ltd.: Car Discharger and Slewing Unit, Dec 1963 p 43*
Great Britain:
Air Terminal Over Victoria Station, May 1962 p 50*
Aluminum Sets New Car Trends, Apr 1962 p 26*; Correction, June 1962 p 64‡ and Aug 1962 p 46‡
British Electrification Conference in London, Jan 1961 p 46*
British Rys.:
AC Electrification Projects, Jan 1961 p 50*; Dec 1961 p 50*; Correction, Feb 1962 p 46‡
Beeching Report on Reshaping of, May 1963 p 32*; June 1963 p 11; Oct 1963 p 10
Beeching Traffic Studies, Aug 1962 p 10; Dec 1962 p 10
Bulkrane System of Container Handling, Nov 1962 p 58*
Car Control Plan, Nov 1963 p 16
Car Washing Plants, German, June 1961 p 43*
Cars, Box, Can Operate in Europe, Dec 1962 p 18*
Cars, Box, for Palletized Freight, Nov 1961 p 14*
Cars, Passenger, New Look for, Apr 1963 p 36*
Coal Delivery Yard; Eastern Region, Feb 1963 p 22*
Design Panel Exhibition, Apr 1963 p 11*, p 36*
Diesel Traction, Experience with, June 1961 p 34*
Disc Brakes Tested, Aug-Sept 1961 p 50*
Dynamometer Car, July 1961 p 39*
Electronic Interlocking; Henley-on-Thames, Feb 1961 p 58*; Feb 1963 p 34*
Engineering Aspects of Modernization Plan, June 1961 p 33*
Equipment Designs Exhibited, Apr 1963 p 11*, p 36*
Freight and Passenger Density Maps, May 1963 p 32*
Liner Trains, May 1963 p 34; Sept 1963 p 10
Locomotive Shop at Stratford, Apr 1961 p 53*
Locomotives, Diesel-Electric:
900-Hp. Type 1 for Scottish Region, Jan 1963 p 30*
1750-Hp. Type 3, Oct 1961 p 48*
2700-Hp., English Electric; Performance of, Mar 1963 p 10*
2750-Hp. Lion, July 1962 p 30*
2750-Hp. Type 4 for Eastern Region, Jan 1963 p 31*
2800-Hp. Falcon, July 1962 p 40*
3300-Hp. Type 3 Deltic, June 1961 p 15*; Oct 1961 p 51*
Experience with, June 1961 p 34
Ownership, Oct 1962 p 22
Locomotives, Diesel-Hydraulic:
600-Hp. Taurus, May 1961 p 16*
1700-Hp. Type 3, June 1961 p 15*; Oct 1961 p 50*
2700-Hp., Apr 1962 p 39*
Experience with, June 1961 p 34
Locomotives, Electro-Diesel, Mar 1962 p 26*
Passenger Car Truck Developed, Oct 1963 p 65
Passenger-Ferry "Avalon", Oct 1963 p 79*
Perishable Handling Station at Hither Green, June 1961 p 47*
Point Heaters Installed on, Dec 1961 p 19*
Power Signal Box at Norton Bridge Junction, Dec 1961 p 18*
Radio, Use of, Apr 1961 p 20
Railcar Sets, New, Developed, Aug 1963 p 36*
Railcar Sets, 3-Car m-u Diesel, Apr 1962 p 41*
Road-Railers on, Oct 1960 p 7; Oct 1962 p 50*
Siding for Transferring Cement from Cars to Trucks, Oct 1961 p 17*
Tracklayer, German, Tested, Mar 1962 p 56*
Training Programs, July 1961 p 52
'Trans-Pennine' Diesel Trains, Apr 1961 p 22*
Travolator in Bank Station, Jan 1961 p 6
Uniforms, New Look in, Apr 1963 p 11*
Wheel Profiler; Western Region, Feb 1963 p 58*
White Paper on Proposed Reorganization, Feb 1961 p 41
Work Study Techniques, June 1962 p 42*; July 1963 p 10
Yards, Automated, Speed Freight, Nov 1961 p 48*
British Transport Comm.:
Beeching, Richard, Chairman of, May 1961, p 44*
Costing for Rates in Britain, Oct 1962 p 42
Electronic Freight Car Number Taker, Jan 1963 p 34*
Linear Induction Motor, Jan 1963 p 35*
Cars, Tank, for Esso Petroleum Co., May 1963 p 21*
Channel Tunnel Project, Dec 1961 p 42*; May 1962 p 10; June 1962 p 9; Nov 1962 p 46; July 1963 p 44; Oct 1963 p 101; Dec 1963 p 41
Ford Motor Co. Charter Trains, Sept 1963 p 10
Hunslet Stoker Cuts Costs, Reduces Air Pollution, Nov 1963 p 40*
Hydraulic Transmission for Light Diesel Locomotives, June 1961 p 56
Locomotive, 227-Hp. Methane Gas Switching, for National Coal Board, Apr 1962 p 38*
London Transport Executive:
Automated Subway Train, June 1963 p 38*
Cars, Aluminum-Bodied Motor, Jan 1961 p 28*
Cars, New, Being Delivered, Aug 1962 p 50
Centenary of, July 1963 p 21*
Laboratory at Chiswick, Feb 1961 p 24*
Lathe, Underfloor, for Machining Wheels, Nov 1961 p 14*
Television, Closed-Circuit, in Holborn Station, Dec 1962 p 18*
Tunnel Borer, Apr 1961 p 40*
Victoria Line Construction, Oct 1962 p 22; Dec 1963 p 23
Welded Rail Train, July 1963 p 21*
Great Britain: (Continued)
Rail Unions Accept Interim Pay Increase, Apr 1962 p 8; Wage Demands, Oct 1963 p 10
Ties, Dow Mac Concrete, Mar 1962 p 35*; May 1962 p 46‡
Transport Act, Jan 1962 p 19; Sept 1962 p 13
Transport Holding Co. Set Up, Nov 1962 p 10
Greece:
Hellenic State Rys.:
Capital Expenditures for 1963, July 1963 p 13
Dieselization, Mar 1962 p 22*
Improvement Program, May 1962 p 30*
Piraeus-Athens-Peloponnesus Ry. Improvement Program, May 1962 p 34*
Grinder, Hydraulic Surface; Norton International, Inc., Aug 1963 p 48
Ground Breaker; Bergman Borr AB, Dec 1963 p 43*

H

Hadfields Ltd.: One-Piece Switch Frogs, Mar 1961 p 40*
Hammers:
Power; Ingersoll-Rand, Mar 1962 p 55*
Riveting; FMA Pokorny, June 1963 p 46*
Hasler Ltd.: K/Mileage Counter, Mar 1963 p 55*
Hawker Siddeley Brush International: 1600-Hp. Diesel Locomotive Engine, Oct 1960 p 49*
Heaters:
Infrared, to Keep Switches Free of Snow, Jan 1962 p 42
Oil; Vapor Corp., Apr 1962 p 50*; Oct 1963 p 85*
Henderson, P. C., Ltd.: Sliding Door Gear for Yugoslavian Box Cars, May 1963 p 50*
Henschel-Werke GmbH:
Engineers from Under-Developed Countries Trained by, Apr 1961 p 35*
Locomotives, Diesel-Hydraulic; 850-Hp., Sept 1962 p 42*; 100-300-Hp., Nov 1962 p 51*
Snow Plow, Removable, Aug-Sept 1961 p 56‡
Herbert, Alfred, Ltd.: Automatic Profile Welder, July 1962 p 50*
Hibberd, F. C. & Co., Ltd.: Diesel-Hydraulic Industrial Locomotive, Dec 1961 p 54*
Highway Building in West Africa, Sept 1963 p 23*
Hird-Brown Ltd.: 3-Color Electric Lamp, Oct 1962 p 46*
Hoist, Ingersoll-Rand Materials, Jan 1961 p 55*
Hole-Digging Machine, Matisa, May 1962 p 36*
Hong Kong: Passenger Cars for Kowloon-Canton Ry., Feb 1963 p 22*
Hose, High Pressure Flexible; British Ermeto Corp., July 1961 p 49*
Hotbox Detectors Installed by Orinoco Mining Co., Apr 1961 p 38*
Hungary:
Hungarian State Rys.:
Aluminum Shielding Protects Communications Cable, Mar 1963 p 46
Locomotives, 1950-Hp. Diesel-Electric, July 1963 p 21*
Outlook for 1975, Feb 1961 p 55
Traffic Boom Preparations, Dec 1963 p 32*
Railway Equipment Suppliers Anticipate Export Build-Up, Dec 1963 p 7, p 35*
Ties, Concrete, Produced in Labatlan Plant, Dec 1963 p 32*
Trainsets for Czechoslovak State Rys., Nov 1962 p 44*; Correction, Feb 1963 p 48‡
Hunslet Engine Co., Ltd.:
Ballast Cleaning Machine, Aug-Sept 1961 p 47*
Underfeed Stoker and Gas Producer, Nov 1963 p 40*
Hursant Developments Ltd.: Electrostatic Multiple-Gun Spray, Feb 1963 p 44*
Hymatic Eng. Co., Ltd.: Impact Wrench Compressor, Jan 1962 p 50*

I

India:
Alco Diesel Locomotives Shipped to, Jan 1962 p 20*; Agreement with Alco, July 1962 p 38
Aluminum Sets New Car Trends, Apr 1962 p 29
Bridge Across Brahmaputra River, Aug 1963 p 25*
Chittaranjan Locomotive Works Expands, May 1962 p 38*
Integral Coach Factory at Perambur, June 1961 p 44*; Oct 1963 p 37
Locomotive Production Expanded, May 1962 p 38*; July 1962 p 38*
Managers of Locomotive Plant Visit Alco Plant in U.S., June 1963 p 22*
Motor Coach, First, Turned Out by Government-Owned Factory, Oct 1963 p 37
Railway Development Program During Third Five-Year Plan, Oct 1960 p 7; June 1963 p 19
Railway Electrification Progress, Apr 1961 p 17*; Oct 1963 p 77*
Railway Lines Under Construction, Sept 1962 p 38*
Railway Results in 1960-61, Apr 1962 p 46
Varanasi Locomotive Plant, July 1962 p 38*
Indicator, Diesel Firing Pressure; Dunedin Eng. Co., Feb 1961 p 51
Indonesia: Equipment Buying Under Seven-Year Plan, Aug-Sept 1961 p 21
Industrial Machine & Equip. Co., Ltd.: Hydramotive Fork Lift Truck, Mar 1963 p 55*
Industrial Railways: A Thriving Market for Locomotive Builders, Oct 1960 p 26*
Ingersoll-Rand Co.:
Concrete Vibrator, Mar 1961 p 44
Hand-Held Tampers, Mar 1961 p 41
Materials Hoist, Jan 1961 p 55*
Pneumatic Wrench, Oct 1960 p 48*
Power Hammer, Mar 1962 p 55*
Insulation:
Owens-Corning-Fiberglas Corp., July 1961 p 49*
Polyurethane Foam in CB&Q Cars, June 1963 p 44*
Integra Ltd.:
Electronic Track Circuit, Apr 1963 p 42*; Oct 1963 p 85
Unit-Constructed Control Panels, Nov 1962 p 51*

Interlocking, Electronic; British Rys., Henley-on-Thames, Feb 1961 p 58*; Feb 1963 p 34*
International Bank for Reconstruction and Development, Rail Loans Made by, Oct 1960 p 73; Nov 1961 p 9
International Exhibition of Transport and Communications to be Held in Munich in 1965, June 1963 p 54
International Labor Organization:
Looks at Effect of Rail Modernization on Employees, July 1961 p 27*
World Poll on Training Progress, July 1961 p 52
International Railway Congress:
Papers to be Presented at, June 1962 p 39
Report from Europe, Aug 1962 p 22*
Report from the United States, Aug 1962 p 31*
International Railway Journal:
Prototype and a Promise, Oct 1960 p 67; Jan 1961 p 9
Sponsors Trip to Seattle's Century 21 Exposition, May 1962 p 24; Winner Chosen, Sept 1962 p 50*; Dec 1962 p 50*
Welcomed as International Forum by USSR Minister of Transport, May 1961 p 581
International Union of Public Transport, Congress of the, July 1963 p 41
International Union of Railways:
Advanced Education Center for European Railway Personnel Holds First Course, May 1963 p 52*
Cybernetics Symposium, Apr 1963 p 23; June 1963 p 19
New Headquarters Building, Feb 1963 p 22*
Ratter, J., Discusses Role of, Mar 1961 p 58*
International Wheel-Set Congress, June 1963 p 50
Iran:
Iranian State Rys.: Dieselization Aids Modernization Program, Oct 1960 p 42*
Plans to Link Turkish and Iranian Rys., Oct 1960 p 10; Mar 1961 p 45*
Ireland:
Irish Transport Co.:
Locomotives, Dual-Cab Diesel-Electric, Mar 1963 p 42*
Operating Results, 1962-63, Dec 1963 p 50
Rehabilitation of, Apr 1961 p 24*
Israel:
Israeli Rys.:
Financial Results, 1962-63, Sept 1963 p 35
Shaped to Meet National Needs, Oct 1960 p 72; Sept 1963 p 32*
Monorail Proposal Studied, Oct 1961 p 9
Italy:
Italian State Rys.:
Building for the Future, Aug 1963 p 32*
Car for Every Cargo, A, Feb 1962 p 30*
Container Service, Mar 1961 p 50
Electrification on the, June 1961 p 18*
Finances a National Issue, June 1961 p 22*
Handling Olympics Traffic, Jan 1961 p 67*
Locomotive Design, Electric, June 1961 p 21*
Locomotives, Switching: Steam Converted to Electric, Aug-Sept 1961 p 41*
Locomotive, Fiat-Alsthom 2400-Hp. Diesel-Electric Tested, Nov 1962 p 27*
Locomotives, Switching, New Concepts in, July 1961 p 34*
Monorail Systems Promoted, Oct 1963 p 94
Ivory Coast Ry.: Improvements Needed to Keep Pace with Highway Growth, Sept 1963 p 31*

J

Jacks:
Hydraulic; Templeton, Kenly & Co., Dec 1963 p 43
Portable; Matterson Ltd., Jan 1963 p 47*
Soil Stabilization; Air Placement Equip. Co., Mar 1961 p 44
Jackson Vibrators, Inc.: Monorail Tamper, Feb 1961 p 51
Jamaica:
Alumina Jamaica Ltd.: Aluminum Hopper Cars Pass Derailment Test, May 1961 p 28*; Description of Cars, Apr 1962 p 28*
Aluminum Co. of America: Aluminum Hopper Cars, Oct 1963 p 77*
Jamaica Ry. Corp.: Diesel-Hydraulic Railcars, Aug 1962 p 38*
Kaiser Bauxite "Lands" Locomotive, Oct 1962 p 45*
Japan:
Asian Railway Conference (Second) Held in Tokyo, Jan 1961 p 46*; Feb 1961 p 32*
Flexi-Van Service, Dec 1961 p 19*
Japanese National Rys.:
Adhesion Grade Line Replaces Rack Ry., June 1963 34*
Air Springs, Neoprene, May 1963 p 51*; Sept 1963 p 54*
Cab Signal Device, Improved, July 1962 p 16
Cars, A.C. Electric Rail, Oct 1960 p 34*
Cars, Diesel Rail, Aug-Sept 1961 p 32*
Cars, Dual Current, Nov 1962 p 48
Computer for Calculating Train Performance, Oct 1961 p 58*
Container Service, Mar 1961 p 50*
Equipment Exhibited at Second Asian Railway Conference, Jan 1961 p 51*; Feb 1961 p 32*
Facts and Figures for 1961, Jan 1962 p 58
Locomotives, Diesel-Hydraulic 2000-Hp., Oct 1962 p 27*
Locomotives, Silicon Rectifier, Oct 1962 p 28*
Modernization Program, Oct 1961 p 24*; Jan 1962 p 34; May 1962 p 461
Radio, Use of, May 1961 p 12
Rail Sections, New, Designed, June 1962 p 46*
Road-Rail Bus Tested, July 1962 p 16
Snow Plow Doubles as Locomotive, Mar 1961 p 42*; Aug-Sept 1961 p 561
Tokaido Line:
Automatic Train Control, Dec 1961 p 44*; Dec 1962 p 26*
Construction, Sept 1962 p 38*
Japan: (Continued)
Japanese National Rys.: (Continued)
Tokaido Line: (Continued)
Operations on, July 1963 p 26*
Prototype Railcar Sets, June 1962 p 66*
Study Week, July 1963 p 26*
Tunnel, Honshu-Hokkaido, Apr 1963 p 23
Kei-Han-Shin Constant-Speed Commuter Cars, Feb 1962 p 20*; Correction, June 1962 p 641
Locomotives, Switching, New Concepts in, July 1961 p 34*
Modernization Programs of Private Rail Lines, Oct 1961 p 24*
Monorail at Nagoya, May 1962 p 42
Monorail Between Tokyo and Goi Planned, June 1962 p 15
Monorail Between Tokyo and Haneda Airport Begun, June 1963 p 25
Monorail Considered as One Answer to Commuter Problem, Oct 1961 p 27*
Monorail Designed by Lockheed Aircraft Corp., July 1962 p 7, p 18*; Feb 1963 p 46
Monorail Planned by Himeji, Oct 1963 p 94
Monorail to Serve Nikko Area Proposed, Jan 1961 p 18
Nagoya RR "Panorama Car" Electric Trainsets, Feb 1962 p 18*
Nankai Ry. "Shin-Koya" Electric Trainset, Feb 1962 p 18
Nylon Spikes for Concrete Ties, July 1962 p 16
Odaku Electric Ry.:
Articulated m-u Trains, May 1963 p 21*
Improvement Program, Jan 1963 p 44
Subway Cars, Stainless Steel, May 1961 p 53
Subway Operation and Construction, Feb 1961 p 55; Dec 1962 p 49; Dec 1963 p 22
Tokyo Electric Express Ry.:
Commuter Cars, Oct 1962 p 31*
Profits from Passengers, Apr 1961 p 46*
Radio-Active Device to Activate Crossing Warning Signals Tested, Oct 1961 p 37
Joints, Bellows, for High-Temperature Piping; Vokes Genspring, Jan 1961 p 54
Jones & Laughlin Dipping Basket Container, Apr 1962 p 50*
Jordan: Hedjaz Ry. to be Rehabilitated, Oct 1960 p 10; Feb 1961 p 54; Dec 1963 p 50

K

Kalamazoo Mfg. Co.: Developments in Track Maintenance Machines, Mar 1961 p 40
Kampmann, H. A., KG: Gandy-Wagen Road/Rail Car, Feb 1963 p 44*
Kango Elec. Hammers Ltd.: Portable Generator for Ballast Tampers, Jan 1961 p 55*
Kenya, Railway Construction in, Sept 1962 p 30*
Kershaw Mfg. Co.:
Ballast Regulator, Heavy Duty, Nov 1961 p 53
Equipment for Rehabilitating B&O Track, Mar 1962 p 38*
Reversible Plow for Ballast Regulator, Apr 1961 p 50*
Krauss-Maffei Diesel-Hydraulic Locomotives for SP and D&RGW, Aug-Sept 1961 p 27*; Performance of, Jan 1963 p 28*
Kugelfischer Georg Schafer & Co.: Axle Bearings, Oct 1963 p 81*

L

Labor Unions:
British Rail Unions Accept Interim Pay Increase, Apr 1962 p 8; Wage Demands, Oct 1963 p 10
U.S. Presidential RR. Comm. on Work Rules Makes Report, Apr 1962 p 48
Ladders, Aerial; Utility Body Co., Oct 1963 p 81*
Lamco Joint Venture RR in Liberia, Sept 1962 p 24*; Oct 1962 p 50*; July 1963 p 45
Lamp, Location; Tilley Lamp Co., May 1963 p 51*
Lamp, Nuclear Switch; US Radium Corp., Mar 1963 p 54*
Lamp, 3-Color Electric; Hird-Brown, Oct 1962 p 46*
Lansing Bagnall Ltd.:
High-Speed Electric Trucks, June 1962 p 59*
Triple-Mast Lift Trucks, Mar 1963 p 53*
Lathe, Underfloor, for Machining Wheels; London Transport Executive, Nov 1961 p 14*
Level Indicator; Alan Cobham Eng., Oct 1963 p 74*
Level, Switch, for Narrow-Gage Track; Henry Williams, Ltd., Mar 1961 p 40
Lebanese State Rys. Modernization Program, Dec 1962 p 44*
Liberia:
Aerial Mapping of Bomi Hills-Mano River Line, Mar 1961 p 34*
Car Tipper for Use in, Oct 1962 p 50*
Lamco Joint Venture Line, Sept 1962 p 24*; Oct 1962 p 50*; July 1963 p 45
RRs Under Construction, Sept 1962 p 24*
Lift Trucks (See Trucks, Industrial)
Linde Plate Edge Preparation Unit, Apr 1962 p 50*
Liquid Nitrogen Refrigeration System; British Oxygen Co., Ltd., Dec 1963 p 43
Loader, Rail-Road; Matisa, Nov 1963 p 44*
Loans, World Bank, 1959-60, Oct 1960 p 73; 1960-61, Nov 1961 p 9
Locomotive Maintenance (See Shops)
Locomotive Market: Industrial Railways, Oct 1960 p 26*
Locomotive Simulator; Brown Boveri & Cie., July 1963 p 46
Locomotives:
Atomic-Powered, Outlook for, Feb 1962 p 40
Comparison of Diesel and Steam Costs in U.S., Feb 1962 p 471
Diesel-Electric:
Alco Prod. 2400-Hp. DL-640, Oct 1961 p 55*; 2400-Hp. Century 424, Mar 1963 p 10*
Argentine State Rys. 1420-Hp., Aug 1962 p 50*
Argentine State Rys., U13C, Jan 1963 p 22*
Belgian National Rys., May 1963 p 40*
Locomotives: (Continued)
Diesel-Electric: (Continued)
Brazilian Federal Rys. U8B and U5B, Aug-Sept 1961 p 38*
British Rys. (See Great Britain: British Rys.)
Comparison with Diesel-Hydraulic, Oct 1960 p 6
Czechoslovak State Rys., New Designs, Nov 1961 16*; 2000-Hp., Nov 1962 p 45*
Economic Superiority Questioned, Feb 1961 p 62; Apr 1961 p 541
Fiat-Alsthom 2400-Hp. Tested in Italy, Nov 1962 27*
Finnish State Rys. 2800-Hp. CC, Jan 1963 p 33*
French National Rys. Developments, Nov 1963 p 33*; Unit with Benefit of AC Traction, Nov 196 p 39
General Electric U25B's; Slip-Supressing Brake Tested, May 1961 p 48*; UP Units, Jan 1962 p 21*; Feature New Look, Apr 1962 p 46*
General Motors 25,000th, Nov 1962 p 28*
Hellenic State Rys., Mar 1962 p 22*
Henschel-Werke 2000-Hp., Nov 1962 p 45*
How Steel Company of Wales Uses, Nov 1962 p 3
Hungarian State Rys. 1950-Hp., July 1963 p 21*
Irish Rys. Dual-Cab, Mar 1963 p 42*
Japanese, Exhibited at Second Asian Railway Conference, Feb 1961 p 34*
Manila RR 1200/1100 Hp., Dec 1962 p 32*
Miferma Iron Ore 2800-Hp., Dec 1962 p 36*
National Rys. of Mexico Assembles First Locomotives, Oct 1963 p 40*
Netherlands Rys. 1400-Hp., Sept 1962 p 50*
New South Wales Govt. Rys. 1800-Hp., Apr 1963 p 11*
New Zealand Govt. Rys., June 1963 p 22*
Nyasaland Rys. 1200-Hp., July 1963 p 34*
South African Gen. Elec. Co., Feb 1963 p 44*
Southern Ry. of Peru, for Steep Grades, Feb 1962 p 29*
Swedish State Rys., Jan 1962 p 28*
Trans-Zambesia Rys. 1200-Hp., July 1963 p 34*
USSR, Trends in, Jan 1962 p 31*; Dec 1963 p 44
USSR TU2, Nov 1962 p 44*
Diesel-Hydraulic:
Austrian Federal Rys. 1500-Hp., June 1963 p 36*
British Rys. (See Great Britain: British Rys.)
Ceylonese Colombo Port Comm. 600-Hp., July 1963 p 34*
Comparison with Diesel-Electric, Oct 1960 p 68*
Czechoslovak State Rys., Nov 1961 p 16*
German Federal Ry., Types Used by, Mar 1961 p 27*; June 1962 p 32; 4000-Hp., Apr 1963 p 10*
German State Ry. V180, May 1961 p 35*
Henschel-Werke GmbH 850-Hp., Sept 1962 p 42*; 100-300-Hp., Nov 1962 p 51*
Hibberd, F. C., & Co., Industrial, Dec 1961 p 54*
Japanese, Exhibited at Second Asian Railway Conference, Feb 1961 p 34*
Japanese National Rys. 2000-Hp., Oct 1962 p 27*
Krauss-Maffei, for SP and D&RGW, Aug-Sept 1961 p 27*; Performance of, Jan 1963 p 28*
Nyasaland Rys. 340-Hp., Dec 1962 p 18*
Snow Plow Attachment; JNR, Mar 1961 p 42*; Henschel-Werke GmbH: Aug-Sept 1961 p 561
Swedish State Rys., Jan 1962 p 29
Switching, New Concepts in, July 1961 p 34*
Transmission for Light Units; Motor Rail Ltd., June 1961 p 56
Turkish State Rys. 2700-Hp., Aug-Sept 1961 p 31*; Jan 1962 p 44*
USSR 3000-Hp., May 1962 p 21*; 4000-Hp., July 1962 p 25*; TGM-10, Sept 1962 p 50*
USSR, Trends in, Jan 1962 p 31; Dec 1963 p 44
Diesel-Mechanical:
Czechoslovak State Rys. Switching, Nov 1961 p 1
Swedish State Rys. 295-Hp. Switching, Apr 1962 p 34*
Electric:
Adhesion Line in Japan, June 1963 p 34*
Alsthom Company Locomotive with Monomotor Trucks, June 1961 p 41*
Austrian Federal Rys. 4850-Hp., July 1963 p 50*
Belgian National Rys., May 1963 p 40*; July 196 p 24*
Central Ry. of Brazil 4400-Hp., Apr 1963 p 34*
Chinese Rys. 6000-Hp., Jan 1961 p 62*
French National Rys. Test AC-DC, Mar 1962 p 28*; Developments on, Nov 1963 p 34*
German Federal Ry., Types Used by, Mar 1961 p 27*; June 1962 p 32; Rheingold Express, July 1962 p 44*
German State Ry. Multi-Purpose, Mar 1962 p 24*
Italian State Rys. Converts Steam Switchers, Aug Sept 1961 p 41*
Italian State Rys.' Designs, June 1961 p 21*
Japanese, Exhibited at Second Asian Railway Conference, Feb 1961 p 34*
Japanese National Rys. Silicon Rectifier, Oct 196 p 28*
Multi-Voltage, for European International Services, July 1963 p 24*
Pennsylvania RR Ignitron Rectifier, May 1961 p 24*
Polish State Rys. 3000-Hp., June 1962 p 66; July 1962 p 34*
Swedish State Rys. DM-3 7500-Hp., Oct 1960 p 33*; Jan 1962 p 27*; 4500-Hp. Silicon Rectifie Apr 1962 p 34*
USSR, Trends in, Jan 1962 p 30*; Dec 1963 p 44
Electro-Diesel, British Rys. Test, Mar 1962 p 26*
Electro-Hydraulic Conversion in Austria, Jan 1963 p 6*
Fuel Cell as Power for, Feb 1962 p 42
Future Sources of Power for, Feb 1962 p 39
Gas-Generator; Swedish State Rys., Feb 1962 p 40
Gas-Turbine: English Electric Builds 2700-Hp. Experimental, Feb 1961 p 9
How to "Land" a Locomotive, Oct 1962 p 45*
ILO Looks at Switch from Steam to Electric and Diesel Traction, July 1961 p 27*
Methane Gas; National Coal Board 227-Hp. Switche Apr 1962 p 38*
Mining; National Mine Service, Jan 1961 p 54*; Fe 1961 p 51*

Locomotives: (Continued)
Remote-Control Operation in U. S., Oct 1962 p 39*; In Germany, Dec 1963 p 24*
Steam: Turkish State Rys. 2-10-0 Type, Jan 1962 p 45*
Suri Transmission for Diesels, July 1961 p 21*
Londex Ltd. Pressure Switches, June 1963 p 46*
Lubricant, Dry, for Switch Plates; G. W. Smith & Sons, Inc., Mar 1962 p 54
Lull Eng. Co.: Load Carrier, Apr 1961 p 50*

M

MAN AG Mobile Crane, May 1963 p 51*
MacGregor & Co., Ltd.: Sliding Roof for Open Cars, Apr 1961 p 51*
MacGregor-Comarain S.A., of France: Roll-Back Freight Car Roof, Aug 1963 p 31*
Machinery (Continental) Ltd.: Swedish Sealing Technique, July 1963 p 50*
Magnus Chemical Co.:
Mobile Oil-Cleaning Equipment, July 1963 p 50*
'Tramway' Aids Small-Part Tank-Cleaning, June 1961 p 51*
Maintenance of Way:
Erie-Lackawanna Mechanizes Spot Tamping, Dec 1961 p 48*
Exhibit at Elst, Feb 1961 p 49; Mar 1961 p 38*; May 1961 19*; Correction, June 1961 p 56
Exhibit at Innsbruck, May 1963 p 37*
German Federal Ry. Practices, June 1962 p 35*
Matisa Machines Mechanize, Nov 1963 p 42*
Plasser & Theurer Tools to Mechanize, Sept 1963 p 36*
SAR Mechanizes Track Maintenance, Dec 1961 p 28*
Malayan Ry. RAB Signaling, Dec 1962 p 40*
Management:
New Look for Irish Transport, Apr 1961 p 26*
Problem of British Railways, May 1961 p 45
Marine & Ind. Power Co. Pty. Ltd.: Rail-Motor Gang Trolley, Apr 1961 p 51*
Maschinenfabrik Augsburg-Nurnberg AG: Underfloor Diesel Engine for Railcars, Feb 1962 p 43*
Maschinenfabrik Deutschland Aktiengesellschaft: Oil-Hydraulic Re-Railing Tackle, Feb 1961 p 51
Matisa (Materiel Industriel S.A.):
Ballast Cleaner, Nov 1963 p 42*
Ballast Cribbing Machine, June 1962 p 60*
Ballast Regulator and Loader, June 1962 p 60*
Ballast Tamper, Heavy, Aug-Sept 1961 p 47*
Hole-Digging Machine, May 1962 p 36*
Inter-Sleeper Rammer, June 1962 p 60*
Level Tamper, May 1962 p 37*
Rail Curve Calculators, Mar 1961 p 41; Mar 1963 p 53*
Rail-Lifter and Packer, June 1962 p 60*
Matisa Equip. Corp.: Equipment Used to Rehabilitate B&O Track, Mar 1962 p 38*
Matterson Ltd.: Portable Jack, Jan 1963 p 47*
Mauritania:
MIFERMA Line, Oct 1960 p 73; Dec 1962 p 36*; July 1963 p 45
No Rail-Highway Competition, Sept 1963 p 53*
Measurement Systems, World Poll on, Jan 1961 p 16; Feb 1961 p 52
Metals for Industry, Inc.: Aluminum Solder, Nov 1961 p 52
Meter, Elapsed Time; English Elec. Co., Dec 1961 p 55
Metropolitan-Cammell Carriage & Wagon Co.:
Hydrostatic Sideloaders, Mar 1963 p 53*
Mobile Cranes, Apr 1963 p 43*
Mexico:
Bridge Links North and South, Feb 1963 p 41*
Chihuahua-Pacific Ry., Construction, Jan 1961 p 32*; Jan 1962 p 54; Nov 1962 p 44*; Oct 1963 p 44*
National Rys. of Mexico:
Improvement Program, Jan 1963 p 37
Locomotives, Diesel-Electric, Assembled, Oct 1963 p 40*
Retarder at Valley de Mexico Yard, Jan 1963 p 7*
Pan American Railway Congress Held in, May 1963 p 45; Oct 1963 p 38*; Dec 1963 p 39*
Sahagun Freight Car Shops, Oct 1963 p 42*
Sonora-Baja California Ry. Fights Sand, Mar 1963 p 30*
Microwave:
Aerial Surveying for Routes, Mar 1963 p 36*
How to Get Ready for, Feb 1961 p 20*
Transistorized Carrier; Collins Radio Co., Nov 1961 p 53*
Middle East, Rail Lines Under Construction or Proposed in, Sept 1962 p 38*
Mileage/Kilometrage Counter; Hasler Ltd., Mar 1963 p 55*
Mitsubishi Electric: YAC Control Computer, Dec 1962 p 58*
Mitsubishi Nippon Heavy-Ind.: Diesel Engine, Aug 1962 p 42*
Modlinski, Z., Interview with, Jan 1962 p 46
Monorail Tamper; Jackson Vibrators, Feb 1961 p 51
Monorails:
Alweg, for Seattle Century 21 Exposition, May 1961 p 54*; May 1962 p 24*
French System Promoted in Italy, Oct 1963 p 94
In Operation or Under Study, May 1961 p 56
Israel Studies Proposal for, Oct 1961 p 9
Japanese Systems (See Japan)
USSR Plans for, Oct 1960 p 10; Dec 1962 p 49
Vienna Plans for, Apr 1962 p 8
Wuppertal Line Gets m-u Trainsets, July 1963 p 33*
Motor Coaches:
Hy-Rail Equipment; Fairmont Ry. Motors, Aug-Sept 1961 p 47*
Japan Tests Rail-Highway Bus, July 1962 p 16
Road-Rail Gandy-Wagen; H. A. Kampmann KG, Feb 1963 p 44*
AB Scania-Vabis Air-Spring, Feb 1961 p 51*
Motor-Generator Sets, Mobile; Swedish State Rys., May 1963 p 46*
Motor, Linear Induction, Developed by BTC, Jan 1963 p 35*
Mozambique:
Mozambique State Rys. Extension, Sept 1962 p 31*
Trans-Zambesia Rys. 1200-Hp. Diesel-Electric Locomotives, July 1963 p 34*

N

National Coal Board (Gr. Br.): 227-Hp. Methane Gas Switching Locomotive, Apr 1962 p 38*
National Mine Service Co.: Mining Locomotives, Jan 1961 p 54*; Feb 1961 p 51*
Netherlands:
Netherlands Rys.:
Cars, Dump, May 1963 p 21*
Cars, 28-Ton Hopper, Apr 1961 p 37*
First CTC Installation, Oct 1961 p 32*
Good Planning Keeps Rotterdam Freight Moving, Jan 1961 p 22
Locomotive, 1400-Hp. Diesel-Electric, Sept 1962 p 50*
M+W Exhibit at Elst, Feb 1961 p 49; Mar 1961 p 38*; May 1961 p 19*; Correction, June 1961 p 56
One-Man Crews, Feb 1962 p 461; Apr 1963 p 50
Piggyback, Use of, Studied, Apr 1961 p 36*
Radio, Use of, May 1961 p 13
Stations Modernized, Oct 1961 p 40*
Tamper, KST 95 Zig-Zag, Aug 1962 p 45*
Ties, Zig-Zag Concrete, Mar 1961 p 38*
Trainsets, Four-Car Electric, Dec 1961 p 24*
Rotterdam's Rys. Work to Serve a Prosperous Economy, Jan 1961 p 9, p 20*
Subway in Rotterdam, Jan 1961 p 23*; Dec 1963 p 23
Vapor International Holland Enlarges Facilities, Jan 1963 p 6*
New Publications:
Year 1962: Sept p 46; Oct p 48; Nov p 56; Dec p 55
Year 1963: Feb p 57; Apr p 44; May p 55; June p 21; July p 48; Sept p 50; Oct p 9; Nov p 46
New York Air Brake Co.: Positive Seal Pipe Fittings July 1961 p 49*
New Zealand:
Car, Largest Tank, May 1962 p 44*
New Zealand Govt. Rys.:
Bridge Across the Kowai River, July 1963 p 21*
Cars, Insulated Tank, Oct 1963 p 79*
Locomotives, Twin-Engined Diesel-Electric Switching, June 1963 p 22*
New Line Proposals, June 1963 p 25
Rail-Road Ferry "Aramoana", Jan 1961 p 21*; Apr p 46
Travel Center at Rotorua, June 1961 p 14*
Nigeria:
International Trade Fair Visitors, Jan 1963 p 7*
Nigerian Railway Corp.:
Dieselization Pays Off, Oct 1962 p 32*
Improvements Needed to Keep Pace with Highway Growth, Sept 1963 p 26*
Operating Study, Oct 1962 p 32*; Nov 1962 p 9
Radio, Use of, May 1961 p 13
Stanford Research Institute Study, Oct 1962 p 34
Nolan Hinged and Sliding Derails and Stands, Mar 1962 p 55
Nordson Corp.: Spray Paint Unit, Mar 1963 p 54*
Northwestern Motor Co.: Brush Cutter, June 1963 p 46*
Norton International, Inc.: Hydraulic Surface Grinder, Aug 1963 p 48
Norwegian State Rys. Modernization Program Paying Off, Jan 1963 p 18*
Nuclear (See Atomic)
Nyasaland Rys.:
Locomotives, 1200-Hp. Diesel-Electric, July 1963 p 34*
Locomotives, 340-Hp. Diesel-Hydraulic, Dec 1962 p 18*

O

Oil-Cleaning Equipment, Mobile; Magnus Chem. Co., July 1963 p 50*
Olympics: Big Transport Job, Jan 1961 p 67*
Orenstein-Koppel & Lubecker Vibrating Tamper, May 1962 p 36*
Organization for Railway Cooperation:
Common Frontier Stations for Customs Inspections Stressed, Mar 1961 p 7
Progress of, Jan 1961 p 6
Osmose Wood Preserving Co. of America, Inc.: Portable Wood Treatment Plant, Dec 1963 p 54*
Owens-Corning-Fiberglas Corp.: Transportation Insulation, July 1961 p 49*

P

Paint: John S. Craig & Co. Gelled Primers, Nov 1961 p 53
Paint and Plaster Spray Gun; Air Placement Equip. Co., June 1961 p 51*
Paint Shop on Wheels; Nordson Corp., Mar 1963 p 54*
Painting, Electro-; Pinchin Johnson & Assocs., Sept 1963 p 41
Pakistan:
Alco Workers Autograph "Shipment Cocoon", Jan 1963 p 7*
Dieselization Program, Dec 1961 p 18*; Jan 1963 p 7*
Steel Ties Shipped by Bethlehem Steel, Mar 1963 p 12*
Pan American Railway Again Proposed, Oct 1963 p 48*
Pan American Railway Congress (Tenth) Held in Brazil, Jan 1961 p 46*; Feb 1961 p 11
Pan American Railway Congress (Eleventh) Held in Mexico, May 1963 p 45; Oct 1963 p 38*; Dec 1963 p 39*
Passenger Business:
Olympics; Big Job for Italian State Rys., Jan 1961 p 67*
Tokyo Electric Express Ry., Apr 1961 p 46*
Passenger Fares (See Fares)
Passenger Service:
"Auto-in-Train" Service; German Fed. Ry., Feb 1961 p 55
Passenger Service: (Continued)
European RRs Cooperate to Improve, Mar 1961 p 7
Peerless DS Commutator Undercutter, Nov 1961 p 28*
Perishable Handling:
British Rys. Hither Green Station, June 1961 p 47*
Gffo Refrigerator Cars for Frozen Foods, Mar 1963 p 39*
South African Rys. & Harbours, Apr 1961 p 19*
Permali Ltd.: Densified Wood Fish Plates, Mar 1962 p 55
Peru:
National Railway Administration Organized, Apr 1962 p 47; Oct 1962 p 24
Southern Ry. Diesel-Electric Locomotives for Steep Grades, Feb 1962 p 29*
Philippines, The:
Manila Railroad:
Construction Projects, Dec 1962 p 33*
Dieselization Program, Dec 1962 p 32*
Modernization Program, Feb 1961 p 49
Profit Sharing Plan, Feb 1961 p 49
Photogrammetry (See Aerial Surveys)
Piggyback (See Trailer-on-Flat-Car Service)
Pinchin Johnson & Assocs.: Electro-Painting, Sept 1963 p 41
Pintsch Bamag AG.:
Train Lighting System, Apr 1961 p 50*
Transistorized Level-Crossing System, July 1961 p 48*; Correction, Aug-Sept 1961 p 56
Welded Crossing Frogs, Mar 1961 p 41*
'Pionjar' Has Many Railway Uses; Bergman Borr AB, Dec 1963 p 43*
Pipe Fittings, Positive Seal; New York Air Brake Co., July 1961 p 49*
Pirelli; Tarpaulins for Freight Cars, Aug 1962 p 42*
Plasser & Theurer:
Ballast Cleaners, Sept 1963 p 37*, p 38*
Ballast Regulator and Shoulder Cleaner, Sept 1963 p 40*
Profiling Machines, Sept 1963 p 40*
Rail Lifting Device, Sept 1963 p 40*
Tampers, Mar 1961 p 40*; June 1961 p 51*; Oct 1961 p 54*; May 1962 p 36*; Aug 1962 p 45*; Sept 1963 p 36*, p 38*, p 41*
Tower, Motorized, for Tamping Machine, Mar 1962 p 54*
Track Inspection Mobile Laboratory, Jan 1962 p 50*
Track Inspection Vehicle, July 1962 p 50*
Track Lining Machine, Automatic, Sept 1963 p 37*
Twistector for Measuring Change of Cant, Sept 1963 p 38*
Plastic Containers, Werkspoor N.V. Prefabricated, Aug 1963 p 54
Plastic Inserts in Concrete Ties Tested in Hungary, Dec 1963 p 33
Plastic Tank Car Developed in U.S., Sept 1963 p 48*
Plastic Trains Tested in West Germany, Jan 1963 p 25*
Plate Edge Preparation Unit, Linde, Apr 1962 p 50*
Plywood, Laminated, Box Cars; British Rys., Dec 1962 p 18*
Polish State Rys.:
Locomotives, Electric, June 1962 p 66*; July 1962 p 34*
Modernization Plan, Jan 1962 p 46*
Polyurethane Frothed Foam; Baxenden Chem. Co., Ltd., Aug 1963 p 48
Portuguese Rys.: 825-Hp. Diesel-Electric Locomotive, Oct 1961 p 16*
Presence Detector; Gen. Ry. Signal Co., July 1962 p 50*
Psychotechnical Advising in Railway Enterprises, Feb 1961 p 11
Pyke, Bert, Ltd.: Snow Broom Cleans Tracks, Oct 1962 p 46*

R

REA Express International Service, June 1961 p 25*
Racine Hydraulics & Machy., Inc.:
Drill and Saw Maintenance Unit, Dec 1961 p 55*
Multiple-Tie Tamper, July 1962 p 50*
Rail Anchor Machine, Aug 1963 p 48*
Tamper with Built-In Jacks, Mar 1961 p 41*
Rack Railways:
Abt-System in Japan, Aug-Sept 1961 p 34
Swiss Cars for M&PP, Nov 1963 p 54*
Radio:
How Railways Use, Apr 1961 p 20; May 1961 p 12
Telefunken GmbH, for Switching Operations, Jan 1963 p 47*
Radio Control of Trains in USSR, Oct 1963 p 97
Radio-Controlled Switching Locomotives Tested in Germany, Dec 1963 p 24*
Radio Test Equipment; AT & E, Apr 1963 p 43*
Rail:
Japanese Nat. Rys. New Sections, June 1962 p 46*; July 1963 p 30*
Welded:
German Federal Ry. Use of, June 1962 p 35*
Machines for Laying; Ry. Maint. Corp., Dec 1963 p 54*
Track Buckling in, Apr 1962 p 43; June 1962 p 64‡
Woy Woy Tunnel Track Relaid; NSWGR, Oct 1961 p 34*
Welded Frogs Cut Maintenance Costs, Mar 1963 p 32*
Rail-Air-Rail Service in Europe, June 1961 p 7
Rail Anchor Machine; Racine Hydraulics & Machy., Aug 1963 p 48*
Rail Curve Calculators; Matisa, Mar 1961 p 41; Mar 1963 p 53*
Rail Fastenings:
Delta-Clip; Vossloh-Werke, June 1962 p 59*
Spring-Type; Tempered Spring Co., Mar 1961 p 44
Rail Grinders:
Flexible Drives (Gilmans) Ltd., Mar 1962 p 55*; Jan 1963 p 47*
Robel & Co., May 1962 p 37*
Rail-Highway Equipment:
British Rys. Roadrailers, Oct 1962 p 50*
Bus Tested in Japan, July 1962 p 16
Container System Tested in Canada, June 1961 p 48*
Fairmont Ry. Motors Bus, Aug-Sept 1961 p 47*

Rail-Highway Equipment: (Continued)
Gandy-Wagen; H. A. Kampmann, Feb 1963 p 44*
Loader; Matisa, Nov 1963 p 44*
Rail Lifting Devices:
Matisa, June 1962 p 60*
Plasser & Theurer, Sept 1963 p 40*
Rail Planer, Heavy-Duty; Scottish Machine Tool Corp., Jan 1963 p 46*
Rail Saw and Drill; Gustav Wagner, Oct 1963 p 74
Rail Saw, Circular; Societe Industrielle des Metaux Manufactures, Aug-Sept 1961 p 47*
Rail Saws, Robel, Aug 1963 p 48*
Rail Transport, How to Get the Most Out of, Aug 1963 p 43
Rail Trolley Platform, Swiveling; Societe des Anciens Etablissements L. Geismar, Aug 1963 p 48*
Rail Truck; Robel & Co., Nov 1962 p 51*
Railway Maintenance Corp.:
BoltMaster Machine, Mar 1961 p 41*
Cleaning Attachment for Ballast Distributor, Jan 1961 p 54*
Electronic Track Surfacer, July 1961 p 48*
Machines for Laying Welded Rail, Dec 1963 p 54*
Snow Blowers, Mar 1962 p 54*; Apr 1963 p 43*
Spike Driver, Automatic, June 1961 p 50*
Tampers, Dec 1962 p 58*; Aug 1963 p 54*
Railway Supply Industry:
Does Standards Confusion Hurt the, Feb 1961 p 52*
French Manufacturers, Survey of, Nov 1963 p 36*
Ransomes & Rapier Ltd.: Mobile Crane, Oct 1960 p 48*
Rapid Transit:
Automation; UITP Congress Report, July 1963 p 41
European Cities Turning to, Jan 1963 p 12
Rate Making:
Costing for Rates in Britain, Oct 1962 p 42
French Nat. Rys. Modernizes, Jan 1963 p 38*
Rate Brackets Proposed by EEC, July 1963 p 15; Aug 1963 p 10
Reclamation Plant for Track; Swiss Federal Rys., Mar 1961 p 44*
Refrigeration-Heating System for Trailers; Worthington Corp., Oct 1961 p 55*
Refrigeration, Mechanical; Development in U. S. A., Oct 1960 p 24*
Refrigeration System, Liquid Nitrogen; British Oxygen Ltd., Dec 1963 p 43
Re-Railing Tackle, Oil-Hydraulic; Maschinenfabrik Deutschland Aktiengesellschaft, Feb 1961 p 51
Research Laboratory at Chiswick; LTE, Feb 1961 p 24*
Reverser, Railcar; Rolls-Royce, Feb 1961 p 51
Rhodesia:
Link with Tanganyika Studied, Sept 1963 p 10
Railway Plans Studied for, Oct 1963 p 94; Nov 1963 p 53
Rhodesia Rys., CTC on, Oct 1962 p 22
Rhodesia Rys. Plan Ahead, Nov 1961 p 39*
Rhodesia Rys. to Install EDP, Mar 1963 p 12*
Ricoh Synchrofax: Foreign Language Train Announcer, Dec 1963 p 43*
Roadrailers Delivered to British Rys., Oct 1962 p 50*
Robel & Co.:
Gangers' Railcar, Apr 1963 p 42*
Grinding Machine, May 1962 p 37*
Rail Saws, Aug 1963 p 48*
Small Rail Truck, Nov 1962 p 51*
Robinson, Thomas, & Son, Ltd.: Cutter Profile Developer, Dec 1961 p 55
Rolls-Royce Ltd.:
Diesel Engines, Feb 1963 p 44*
Methane Gas Switching Locomotive, Apr 1962 p 38*
Railcar Reverser, Feb 1961 p 51
Roof, Folding, for Freight Cars; Schindler Wagon AG, Apr 1963 p 42*
Roof, Sliding, For Freight Cars; MacGregor & Co., Apr 1961 p 51*; MacGregor-Comarain S. A., Aug 1963 p 31*

S

Salford Electrical Instruments Ltd.: Electronic Freight Car Number Taker, Jan 1963 p 34*
Sand, How Railways Fight, Mar 1963 p 30*
Saturn Ind. Gasses Ltd.: Welding Machine, Oct 1960 p 48*
Saudi Arabia:
Hedjaz Ry. to be Rehabilitated, Oct 1960 p 10; Feb 1961 p 54; Dec 1963 p 50
Radio on Saudi Govt. RR, May 1961 p 13
AB Scania-Vabis Air-Spring Motor Coaches, Feb 1961 p 51*
Scanner, Trackside, for Car Numbers, Developed by BTC, Jan 1963 p 34*
Scharfenbergkupplung GmbH: Light and Heavy Duty Couplers, Nov 1961 p 52
Schindler Wagon AG: Folding-Roof Cars, Apr 1963 p 42*
Schoeller-Bleckmann Steel Works Ltd.: Giesl Ejector, Sept 1962 p 43*
Scottish Machine Tool Corp., Ltd.: Heavy-Duty Rail Planer, Jan 1963 p 46*
Screw-Thread Standards, World Poll on, Jan 1961 p 16; Feb 1961 p 52*
Sealing Technique; Ulvsunda Gummifabriks AB, and Machinery (Continental) Ltd., July 1963 p 50*
Sealmaster Ball Bearings in Millimeter Sizes, Jan 1963 p 47*
Seals for Subway Doors; du Pont-Ulsvunda Gummifabriks AB, Oct 1962 p 46*
Secmafer Track Relaying Gantries, Feb 1963 p 45*
Sellers Injector Corp.: Tank Cleaner, Feb 1963 p 45*
Senegal Rys.: Improvements Needed to Keep Pace with Highway Growth, Sept 1963 p 53*
Servo Corp. of America: Transducer, Jan 1963 p 46*
Shippers Polled on RR Service, June 1961 p 16
Shock Absorber, Hydraulic: Societe de Dispositifs Electriques & Mecaniques DEM, June 1963 p 47
Shops:
Car:
Integral Coach Factory, Perambur, India, June 1961 p 44*
Sahagun, in Mexico, Oct 1963 p 42*
Turkish State Rys. at Adapazari, July 1961 p 42*
Shops: (Continued)
Irish Transport Co., at Inchicore, Apr 1961 p 30
Locomotive:
British Rys. at Stratford, Apr 1961 p 53*
India, May 1962 p 38* (Chittaranjan); July 1962 p 38* (Varanasi)
Steel Company of Wales, Nov 1962 p 34*
Richmond, Fredericksburg & Potomac, Apr 1963 p 31*
Turkish State Rys., July 1961 p 42*; Feb 1963 p 33
Short Lines, Jan 1961 p 9; Feb 1961 p 50; Mar 1961 p 13; Apr 1961 p 11
Sierra Leone Govt. Ry.: Improvements Needed to Keep Pace with Highway Growth, Sept 1963 p 52*
Signaling:
British Rys. Modernization Plan, June 1961, p 37*
JNR Tokaido Line, Dec 1961 p 44*; Dec 1962 p 26*
Malayan Ry. Installs RAB, Dec 1962 p 40*
Signaling System, Transistorized Level-Crossing; Pintsch Bamag AG, July 1961 p 48*; Correction, Aug-Sept 1961 p 56
Simmering-Graz-Pauker AG:
Electronic Inspection Car, Apr 1963 p 42*
Locomotive, 4850-Hp. Electric, for Austrian Fed. Rys., July 1963 p 50*
Railcars, Feb 1962 p 24*
Schenk System Tamper, May 1962 p 37*
Sleepers (See Ties)
Smith, G. W., & Sons, Inc.: Dry Lubricant for Switch Plates, Mar 1962 p 54
Snow Blowers: Ry. Maint. Corp., Mar 1962 p 54*; Apr 1963 p 43*
Snow Broom Cleans Tracks; Bert Pyke Ltd., Oct 1962 p 46*
Snow Fighting Techniques and Equipment Used in U. S., Jan 1962 p 38*
Snow Plow Doubles as Locomotive; JNR, Mar 1961 p 42*; Henschel-Werke GmbH, Aug-Sept 1961 p 561
Snoweeder; Woolery Machine Co., Feb 1963 p 45*
Societe de Dispositifs Electriques & Mecaniques DEM: Hydraulic Shock Absorber, June 1963 p 47
Societe des Anciens Etablissements L. Geismar: Swiveling Rail Trolley Platform, Aug 1963 p 48*
Societe des Etablissements Cadoux: Refrigerator Car for French Nat. Rys., May 1963 p 50*
Societe Industrielle des Metaux Manufactures, SA: Circular Saw Cuts Rail Sections, Aug-Sept 1961 p 47*
Sogo, Shinji, Interview with, Jan 1962 p 34*; May 1962 p 461
Solder, Aluminum; Metals for Industry, Nov 1961 p 52
South Africa:
Local Industries Supply SAR Equipment, Feb 1962 p 44*
South African Rys. & Harbours:
Aluminum Sets New Car Trends, Apr 1962 p 30
Container Service, Mar 1961 p 50
Electrification Program, Apr 1961 p 52; Feb 1962 p 44
Gas-Producer Plant at Koedoespoort, Feb 1961 p 38*
Locomotives, Electric, Nov 1961 p 14*; First Main Line Unit Built in S. A., Apr 1963 p 10*
Perishable Handling, Apr 1961 p 19*
Track Maintenance Mechanized, Dec 1961 p 28*
South African General Electric Co.: Diesel-Electric Locomotive, Feb 1963 p 44*
Southern Instruments Ltd.: Portable Tachometer Senses Speeds, Nov 1961 p 52
Spain:
Sheep Shipped by Rail to Greener Pastures, Jan 1963 p 6*
Spanish National Rys.:
Electrification Progress, Feb 1961 p 14*
Gage-Changing Device, Oct 1963 p 96
Modernization Plan, Aug 1962 p 18*; Nov 1962 p 48
Talgo Trains—First 10 Years, Dec 1961 p 41*
Trains, Triple-Unit Railbus, May 1962 p 44; June 1962 p 66*
Trainsets, 3-Car Electric, Feb 1961 p 14*
Weed-Killing Train, Mar 1962 p 58*
Station at Burgos, June 1961 p 14*
Transfesa Company Operations, June 1961 p 7
Speed-Detector and Recorder, Euro-Commerz, Feb 1962 p 43*
Spike Driver, Automatic; Ry. Maint. Corp., June 1961 p 50*
Spike Driver for Tie and Rail Gangs; Fairmont Ry Motors, Apr 1961 p 51*
Spike-Puller; Fairmont Ry. Motors, Oct 1960 p 49*
Spikes, Nylon, for Use with Concrete Ties Developed in Japan, July 1962 p 16
Spray Gun, Paint and Plaster; Air Placement Equip. Co., June 1961 p 51*
Spray Paint Units:
Hursant Developments Ltd. Electrostatic, Feb 1963 p 44*
Nordson Corp., Mar 1963 p 54*
Spray Process for Resurfacing Jobs; Airco Company International, Jan 1961 p 55*
Spray Prod. Corp.: Chain Roller Dri-Loob, Oct 1961 p 55*
Spraylat Corp.: Plastic-Like Coating for Locomotives, July 1962 p 18*
Spring Testing Machine, Duff-Norton, Apr 1962 p 50*
Springs, Neoprene Blended Air:
Bridgestone Tire Co. and Others, May 1963 p 51*
Tested on Japanese Nat. Rys., Sept 1963 p 54*
Springs, Rubber Disc, Tested on Austrian Fed. Rys., Sept 1963 p 54*
Standardization of Equipment Discussed at Asian Rys Conference, Jan 1962 p 36
Station Names, Jan 1961 p 70; June 1961 p 58; Mar 1962 p 511
Stations, Passenger: (See also Terminals)
Melbourne, Aust., May 1961 p 34
Netherlands Rys. Modernizes, Oct 1961 p 40*
Swiss Fed. Rys., at Berne, Dec 1961 p 34*
Stefani, G.: Diesel Tractor, July 1961 p 48*
Stoker, New, Cuts Costs, Reduces Air Pollution, Nov 1963 p 40*
Stone Machinery Co.: Oscillating Attachment for Cut-off Machine, May 1963 p 51*
Strachan & Henshaw Ltd.: Rope-Hauled Car Puller, Jan 1963 p 46*
Stumec-Geismar Coachscrewing Machine, Feb 1963 p 45*
Subsidies:
Competitive Picture in Australia, Nov 1962 p 40
European RRs Compete Against, Aug 1962 p 24
Problems in Africa, Feb 1963 p 49
Study Made by J. M. Sites, Aug 1963 p 43
Sub-Station, Aluminum; Coseley Buildings, June 1962 p 59*
Subway Cars:
Hamburg Underground Tests DT 2 Trainsets, July 1961, p 32*
Tokyo Underground Ry., May 1961 p 53
Toronto Transit Comm., Nov 1962 p 30*
Subways:
Cities Plan Extensions, Dec 1963 p 22
Egypt Studies Construction of, June 1963 p 9
Frankfurt, Work Begun on, Dec 1963 p 23
Kiev Line Opened, Jan 1961 p 7
Liege Plans System, May 1962 p 10
London (See Great Britain: London Transport Authority)
Montreal, Construction in, May 1963 p 47*
Paris Metro, New Construction on, Mar 1961 p 10; Dec 1963 p 23
Rotterdam Line Under Construction, Jan 1961 p 23*; Dec 1963 p 23
Stockholm Underground Tests Automation, Apr 1963 p 46*; Plans Extensions, Dec 1963 p 22
Tokyo Lines in Service, Feb 1961 p 55; Under Construction, Dec 1962 p 49
Toronto Extends System, Dec 1963 p 18*
Sudan: English Electric Diesel Locomotives Shipped to, Jan 1962 p 20*
Suffolk Iron Foundry Ltd.: Adds to Welding Products Line, Nov 1961 p 52
Sulzer Bros. Ltd.:
LVA Series Diesel Engine, Aug 1962 p 42*
12-Cylinder Diesel Engine, Jan 1963 p 46*
Sumitomo Electric Ind. Ltd.: Neoprene Blended Air Springs, May 1963 p 51*
Suri Hydraulic Transmission for Diesel Locomotives, July 1961 p 21*
Svenska AB Bromsregulator; SAB Load Brake Device, Aug 1963 p 54*
Swaziland, Iron-Ore RR to be Built in, July 1962 p 9; Sept 1962 p 31*
Sweden:
Car, Auto-Transport, Oct 1963 p 96
Electronic Data Processing for Subterranean Train Operation, Oct 1963 p 96
Frigoscandia AB Giffo Refrigerator Car, Mar 1963 p 39*
Fuel Cell Under Development, Sept 1963 p 21
Locomotive, Diesel-Electric, for Bergvik & Ala, June 1963 p 22*
Stockholm Underground Tests Automation, Apr 1963 p 46*; Plans Extensions, Dec 1963 p 22
Swedish State Rys.:
Automated Train Operation, Aug 1962 p 29*
Biggest Freight Shipment, May 1962 p 50*
Cars, Flexible Buffet, Jan 1961 p 31*
Cars, Hopper, Nov 1962 p 45*
Concrete Ties, Apr 1961 p 56*; May 1961 p 22*
Container Service, Mar 1961 p 56*
Financial Results, 1960-61, Feb 1962 p 48
Kiruna-Svappavaara Line, Jan 1963 p 7*
Locomotives:
Diesel-Mechanical Switching 295-Hp., Apr 1962 p 34*
Electric, for Hauling Ore, Oct 1960 p 33*
Electric, with Silicon Rectifiers, Apr 1962 p 34*
Gas-Generator, Feb 1962 p 40*
Mobile Motor-Generator Sets, May 1963 p 46*
Modernization Program, Jan 1962 p 22*
Organization Streamlined, Apr 1963 p 50
Proposals for Closing Part of, June 1963 p 33
Radio, Use of, May 1961 p 13
Train 62 Fair, Aug 1962 p 29*
Switch Heater Developments in U. S., Jan 1962 p 38*
Switch Lamp, Nuclear; US Radium Corp., Mar 1963 p 54*
Switches:
Pressure; Londex Ltd., June 1963 p 46*
Push-Button; EMI Electronics, Oct 1963 p 85*
Switzerland:
Bern-Lotschberg—Simplon Ry. Operating Study, May 1961 p 36*; 50th Anniversary, Aug 1963 p 15
Swiss Federal Rys.:
Aluminum Sets New Car Trends, Apr 1962 p 27*
Container Service, Mar 1961 p 56*
IBM Data Processing Equipment, Oct 1961 p 18*
Motor Vehicles Piggybacked Through Gotthard Tunnel, June 1963 p 49
Radio, Use of, May 1961 p 13
Station at Berne, Dec 1961 p 34*
TEE Trains, Mar 1961 p 23*; Aug-Sept 1961 p 36*
Track Manufacturing and Reclamation Plant, Mar 1961 p 44*
Traffic Through Gotthard Tunnel, June 1963 p 49
Trainsets, 4-and 5-Car Electric, Mar 1961 p 18*, p 22*
Tunnel, New, Planned for St. Gotthard Route, June 1963 p 49; Sept 1963 p 51
Syria: Hedjaz Ry. to be Rehabilitated, Oct 1960 p 10; Feb 1961 p 54; Dec 1963 p 50

T

Tachometer, Portable, Senses Speeds; Southern Instruments Ltd., Nov 1961 p 52
Talbot Waggonfabrik: Side-Discharging Hopper Cars, Dec 1962 p 58*
Tamper, Inc.: Autojack Electromatic Tamper, May 1963 p 51*
Tampers:
Atlas Copco AB, Aug 1962 p 42*
Ingersoll-Rand, Mar 1961 p 41
Jackson Vibrators, Feb 1961 p 51

Tampers: (Continued)
Matisa (Materiel Industriel SA), Aug-Sept 1961 p 47*; May 1962 p 37*; June 1962 p 60*; Nov 1963 p 44*
Orenstein-Koppel & Lubecker, May 1962 p 36*
Plasser & Theurer, Mar 1961 p 40*; June 1961 p 51*; Oct 1961 p 54*; May 1962 p 36*; Aug 1962 p 45*; Sept 1963 p 36*, p 38*, p 41*
Racine Hydraulics & Machy., Mar 1961 p 41*; July 1962 p 50*
Railway Maintenance Corp., Dec 1962 p 58*; Aug 1963 p 54*
Simmering-Graz Pauker Schenk System, May 1962 p 37*
Tamper, Inc., May 1963 p 51*
Tamping, Spot, Erie-Lackawanna Mechanizes, Dec 1961 p 48*
Tanganyika:
Kilombero Valley Branch Completed, Jan 1961 p 42*
Railway Construction in, Sept 1962 p 30*
Tariffs, French National Rys. Modernizes, Jan 1963 p 38*
Tarpaulins for Italian Freight Cars; Pirelli, Aug 1962 p 42*
Tasmanian Govt. Rys.: Searail Service, Nov 1961 p 26*
Taylor & Hubbard: Cant Indicator, Oct 1963 p 74
Telefunken GmbH:
Electronic Retarder, Feb 1962 p 43*
Radio for Switching Operations, Jan 1963 p 47*
Telephone High Speed Data Transmission System; Digitronics Corp., July 1961 p 48*
Television Camera; EMI Electronics Ltd., Oct 1962 p 46*
Television, Closed Circuit, in London Transport's Holborn Station, Dec 1962 p 18*
Tempered Spring Co., Ltd.: Spring-Type Rail Fastenings, Mar 1961 p 44
Templeton, Kenly & Co.: Hydraulic Jack Speeds Track Raising, Lining, Dec 1963 p 43
Tenta AG; Tarpaulins for Freight Cars, Aug 1962 p 42*
Terminals: (See also Stations, Passenger)
Air, Over Victoria Station, May 1962 p 50*
Car Ferry; Danish-German Vogelfluglinie, Aug 1963 p 40*
Swiss Fed. Rys. at Berne, Dec 1961 p 34*
Tesnilka Synthetic-Fabric Bearings, July 1963 p 50
Tester for Diesel Injection and Fuel Systems; Dunedin Eng. Co., Jan 1961 p 55*
Thailand: State Rys. Six-Year Investment Program, Feb 1961 p 16*
Ties:
Baltimore & Ohio Renews, Mar 1962 p 38*
Concrete; JNR Tokaido Line, July 1963 p 30*
Concrete, Produced at Labatlan Plant in Hungary, Dec 1963 p 32*
Concrete; Swedish State Rys.; Apr 1961 p 56*; May 1961 p 22*
Concrete; Trends in Design and Use, Mar 1962 p 33*; May 1962 p 461
Concrete vs. Steel, in France, Nov 1963 p 48
Zig-Zag Concrete; Netherlands Rys., Mar 1961 p 38*
Tilley Lamp Co., Ltd.: Location Lamp, May 1963 p 51*
Togo Rys.: Improvements Needed to Keep Pace with Highway Growth, Sept 1963 p 30*
Tokyo Rubber Industry Co., Ltd.: Neoprene Blended Air Springs, May 1963 p 51*
Ton-Kilometers per Inhabitant—'A Regular Index', Feb 1961 p 62; May 1961 p 581
Tower, Motorized, for Tamping Machine; Plasser Ry. Machy., Mar 1962 p 54*
Tracer, Electronic; Air Reduction Sales Co., Apr 1962 p 50*
Track:
Baltimore & Ohio Rehabilitates, Mar 1962 p 38*
Buckling in Welded Rail, Apr 1962 p 43; June 1962 p 641
Chihuahua-Pacific Ry., Jan 1961 p 32*
German Federal Ry. Rebuilds, Mar 1962 p 27*
JNR Tokaido Line, July 1963 p 29*
M.W Exhibit at Innsbruck, May 1963 p 37*
Moved in Panels by L&N, Mar 1963 p 66*
New South Wales Govt. Rys. Relay Woy Woy Tunnel Tracks, Oct 1961 p 34*
Pre-Assembled Panels; Swedish State Rys., Apr 1961 p 56; May 1961 p 22*
Relaying Gantries; Secmafer, Feb 1963 p 45*
Special Design for Automated Subway Train in U.S., Oct 1961 p 52*
Standard Gage; Kalgoorlie-Kwinana, Western Australia, May 1962 p 29*; Sept 1962 p 36*; Dec 1962 p 7
Welded Frogs Cut Maintenance Costs, Mar 1963 p 32*
Zig-Zag, on Netherlands Rys., Mar 1961 p 38*
Track Circuit, Electronic; Integra Ltd., Apr 1963 p 42*; Oct 1963 p 85
Track Inspection Mobile Laboratory; Alfred J. Amsler & Co., Oct 1961 p 54*; Jan 1962 p 50*
Track Inspection Vehicle; Alfred J. Amsler & Co., July 1962 p 50*
Track Jack; Templeton, Kenly & Co., Dec 1963 p 43
Track Leveling Machine; Plasser & Theurer, Mar 1961 p 40*
Track Liner, Automatic; Plasser & Theurer, Sept 1963 p 37*
Track Maintenance Machines; Kalamazoo Mfg. Co., Mar 1961 p 40
Track Manufacturing and Reclamation Plant; Swiss Federal Rys., Mar 1961 p 44*
Track Profilers; Plasser & Theurer, Sept 1963 p 40*
Track Surfacer, Computer-Controlled; Ry. Maint. Corp., July 1961 p 48*
Tracklayer, Arki-Endon, Tested on British Rys., Mar 1962 p 56*
Traction Motor, 175-Hp.; Crompton Parkinson, Oct 1960 p 49*
Tractor-Scrapers; Caterpillar Tractor Co., Mar 1961 p 40*
Tractors:
Caterpillar D7E, Mar 1962 p 55*
EMI Electronics Robotug, Feb 1962 p 43*
Stefani Midget Diesel, July 1961 p 48*
Trailer-on-Flat-Car Service:
Brazil, Developments in, Nov 1962 p 10; Feb 1963 p 10

Trailer-on-Flat-Car Service: (Continued)
Flexi-Van Service in Japan, Dec 1961 p 19*
Flexi-Vans Speed Australian Freight, June 1962 p 48*
Holland Looks at Piggyback, Apr 1961 p 36*
Swedish State Rys., Aug 1962 p 29*
Tasmania Searail Service, Nov 1961 p 26*
Train Announcer, Foreign Language; Ricoh Synchrofax, Dec 1963 p 43*
Train Lighting System; Pintsch Bamag, Apr 1961 p 50*
Train Performance Calculator Tested by JNR, Oct 1961 p 58*
Train Speeds in Europe, Aug 1962 p 48
Traingraph, Automatic; L. M. Ericssons Signalaktiebolag, Oct 1960 p 48*
Training of Employees:
Apprentice Program; Turkish State Rys., July 1961 p 44
CNR Sends Officers to School, Oct 1960 p 30*
Europe's First Staff-Level Rail College, May 1963 p 52*
Henschel-Werke Trains Engineers from Under-Developed Countries, Apr 1961 p 35*
ILO World Poll on, July 1961 p 52
M.W Employees on German Fed. Ry., June 1962 p 38
Work Study Training on British Rys., June 1962 p 42*; July 1963 p 10
Trains: (See also Trainsets)
Automated Subway, Tested in London, June 1963 p 38*
British Rys. Liner Trains, May 1963 p 34; Sept 1963 p 10
British Rys. Trans-Pennine Diesel, Apr 1961 p 22*
Danish State Rys. 'Lyntog', June 1963 p 42*
JNR Tokaido Line Test Train, July 1963 p 28*
Rheingold Express Modernized by German Fed. Ry. July 1962 p 43*
South Aurora Expresses; Australia, Feb 1963 p 42*
Spanish National Rys. Talgo, Dec 1961 p 41*
Trans-Europ Express, Mar 1961 p 22*; Aug-Sept 1961 p 36*
Weed-Killing; Spanish Nat. Rys., Mar 1962 p 58*
Welded Rail; London Transport Executive, July 1963 p 21*
Trainsets:
British Rys. 3-Car Diesel-Mechanical, Apr 1962 p 41*; 4-Car Diesel-Mechanical, Aug 1963 p 36*
Czechoslovak State Rys. 4-Car Electric, Jan 1961 p 52*; 4-Car Diesel-Mechanical, Nov 1962 p 44*; Correction, Feb 1963 p 481
East German 4-Car Diesel Express, Aug 1963 p 39*
French National Rys. 3-Car Electric, July 1961, p 46*; Aug-Sept 1961, p 561; 2-Car Diesel-Mechanical, Aug 1963 p 36*
German Federal Ry. Developments, Mar 1961 p 27*
Hamburg Underground DT 2 2-Car Electric, July 1961 p 32*
Hellenic State Rys. 3-Car Diesel-Hydraulic, Mar 1962 p 23
Nagoya RR "Panorama Car" 6-Car Electric, Feb 1962 p 18*
Nankai Ry. "Shin-Koya" 4-Car Electric, Feb 1962 p 19
Netherlands Rys. 4-Car Electric, Dec 1961 p 24*
Odakyu Electric Ry. 11-Car, May 1963 p 21*
Plastic Trains Tested in West Germany, Jan 1962 p 25*
Spanish National Rys. 3-Car Electric, Feb 1961 p 14*; 3-Car Diesel-Mechanical Railbus, May 1962 p 44; June 1962 p 66*
Swedish State Rys. 3-Car Electric, Jan 1962 p 23*
Swiss Rys. 4- and 5-Car Electric, Mar 1961 p 18*, p 22*
Turkish State Rys. 3-Car Diesel-Hydraulic, June 1961 p 39*; Jan 1962 p 43*; 3-Car Electric, Nov 1961 p 46*
Wuppertal Monorail m-u, July 1963 p 33*
Yugoslav Rys. 4-Car Aluminum Diesel-Electric, July 1963 p 40*
Transducer; Servo Corp. of America, Jan 1963 p 46*
Trans-Europe Express Merchandise Service, Dec 1961 p 23*
Trans-Europe Express Service, New Trains for, Mar 1961 p 22*; Aug-Sept 1961 p 36*
Transportation Facilities, Technological Comparisons of, Mar 1961 p 49
Transportation, Integrated, Planned in Brazil, Oct 1963 p 58B
Transportation Policies of Governments, J. M. Sites on, Aug 1963 p 43
Transportation Policy Proposed for European Common Market, Dec 1961 p 20*
Tree Belt Protects China Desert Rail Line, Mar 1963 p 30
Trucks, Car:
British Rys. New Passenger, Oct 1963 p 65
General Steel Ind. Lightweight Passenger, Oct 1961 p 54*
Gloucester Ry. Carriage & Wagon Co. Rubber-Sprung Freight, Dec 1963 p 54*
Trucks, Industrial:
Freight Car Loader; Lull Eng. Co., Apr 1961 p 50*
High-Speed Electric; Lansing Bagnall, June 1962 p 59*
Hydramotive Fork Lift; Industrial Machine & Equip. Co., Mar 1963 p 55*
Hydrostatic Sideloaders; Metropolitan-Cammell Carriage & Wagon Co., Mar 1963 p 53*
Lift Truck for TOFC Loading; FWD Wagner, June 1962 p 59*
Triple-Mast Lift; Lansing Bagnall, Mar 1963 p 53*
Trucks, Locomotive: Alsthom Extends Monomotor Principle, June 1961 p 41*
Tunisia, Diesel-Electric Switching Locomotive for, Nov 1962 p 44*
Tunnels:
Donnerbuhl, in Berne, Dec 1961 p 37*
English Channel Tunnel Project; Dec 1961 p 42*; May 1962 p 10; June 1962 p 9; Nov 1962 p 46; July 1963 p 44; Oct 1963 p 101; Dec 1963 p 41
JNR Honshu-Hokkaido Tunnel, Apr 1963 p 23
LTE Uses Drum Digger Borer, Apr 1961 p 40*
Switzerland Plans New Tunnel on Gotthard Route, June 1963 p 49; Sept 1963 p 51
Turkey:
Plans to Link Turkish and Iranian Rys., Oct 1960 p 10; Mar 1961 p 45*

Turkey: (Continued)
Turkish State Rys.:
Car Shop at Adapazari, July 1961 p 42*
Dieselization Begun, June 1961 p 38*
History of, and Developments on, Feb 1963 p 26*
Locomotives, 2-10-0 Type Steam, Jan 1962 p 45*
Locomotives, 2700-Hp. Diesel-Hydraulic, Aug-Sept 1961 p 31*; Jan 1962 p 44*
Suburban Electrification Pays Off, Nov 1961 p 44*
Trainsets, 3-Car Diesel-Hydraulic, Jan 1962 p 43*
Twistector; Plasser & Theurer, Sept 1963 p 38*

U

UIC (See International Union of Railways)
Uganda:
Jinja-Bukonte Rail Line, July 1961 p 50
Railway Construction in, Sept 1962 p 30*
Ulvsunda Gummifabriks AB:
Seals for Subway Doors, Oct 1962 p 46*
Simple Sealing Technique, July 1963 p 50*
Underground Railroads (See Subways)
Uniforms, New; British Rys., Apr 1963 p 11*
Union Carriage & Wagon Co., Ltd., S.A., Operations, Feb 1962 p 44*
Union of Soviet Socialist Republics:
Beshchev, B. P., Interviewed on Rail Progress, Feb 1961 p 28*; Apr 1961 p 43 (Electrification)
Electric Belt Line Around Moscow Planned, Sept 1962 p 48
Electrification Progress, Apr 1961 p 43; Nov 1961 p 55; Jan 1962 p 30*
Gage-Changing Device, Sept 1963 p 21
Kiev Subway Opened, Jan 1961 p 7
Locomotives:
3000-Hp. Diesel-Hydraulic, May 1962 p 21*
4000-Hp. Diesel-Hydraulic, July 1962 p 25*
TGM-10 Diesel-Hydraulic, Sept 1962 p 50*
TU2 Diesel-Electric, Nov 1962 p 44*
Trends in, Jan 1962 p 31*; Dec 1963 p 44
Monorail Plans, Oct 1960 p 10; Dec 1962 p 49
Radio Control of Trains, Oct 1963 p 97
Railway Expansion and Development, Jan 1961 p 18; Jan 1962 p 30*; July 1962 p 16; Mar 1963 p 52; May 1963 p 31; Sept 1963 p 42
Ties, Concrete, Use of, Mar 1962 p 36*, p 50*1
Training of Railway Men, July 1961 p 54
Trans-Caspian Car Ferry, Mar 1961 p 24*
Volume of Freight Traffic, Feb 1963 p 481 (Correction)
United States:
Aluminum Sets New Car Trends, Apr 1962 p 23*
Alweg Monorail at Seattle Century 21 Exposition, May 1961 p 54*; May 1962 p 24*
American Railway Progress Exposition, May 1963 p 45*; Aug 1963 p 17; Dec 1963 p 31
Automatic Train Control; Gen. Elec., May 1962 p 50*
Baltimore & Ohio Rehabilitates Track, Mar 1962 p 38*
Brake, Slip-Suppressing, Adapted for Use in, May 1961 p 48*
Chicago, Burlington & Quincy Foam-Insulated Box Cars, June 1963 p 44*
Erie-Lackawanna Mechanizes Spot Tamping, Dec 1961 p 48*
General Motors Celebrates 25,000th Diesel, Nov 1962 p 28*
Illinois Central: Peerless DS Commutator Undercutter, Nov 1961 p 28*
Locomotive Power, Future Sources of, Feb 1962 p 39
Locomotive, Remotely-Controlled, Hauls Coal Cars, Oct 1962 p 39*
Locomotives, Alco Century Diesel-Electric, Mar 1963 p 10*
Locomotives, General Electric U25B Diesel-Electric, for UP, Jan 1962 p 21*; Feature New Look, Apr 1962 p 46*
Locomotives, K-M Diesel-Hydraulic for SP and D&RGW, Aug-Sept 1961 p 27*; Performance of, Jan 1963 p 28*
Louisville & Nashville Moves Track in Panels, Mar 1963 p 66*
Manitou & Pike's Peak Swiss Rack Cars, Nov 1963 p 54*
Mechanical Refrigerator Car Development, Oct 1960 p 24*
Mergers Make Slow Progress, Jan 1961 p 64
New York Central 2000-Hp. Diesel Electric Locomotives, Oct 1961 p 17*
North American Car Corp. Introduces Aluminum Gondola Car and "Auto-Porter", Apr 1961 p 44*
Pennsylvania RR Ignition Rectifier Locomotives, May 1961 p 24*
Pennsylvania RR Storage Tanks Cut Fuel Costs, Nov 1961 p 25*
Plastic Tank Car Developed, Sept 1963 p 48*
Presidential Railroad Comm. Report on Work Rules, Apr 1962 p 48
REA Express World-Wide Expansion, June 1961 p 25*
Report from, by D. J. Russell, Aug 1962 p 31*
Richmond, Fredericksburg & Potomac Shop at Richmond, Apr 1963 p 31*
Seattle World's Fair Previews Future RRs, Aug 1962 p 35*
Snow Fighting Techniques and Equipment, Jan 1962 p 38*
Soviet View of U.S. Railways, Feb 1961 p 30
Television Associates of Indiana: Aerial Surveying Techniques, Mar 1963 p 36*
Track for Automated Subway Train, Oct 1961 p 52*
United States Radium Corp.: Nuclear Switch Lamp, Mar 1963 p 54*
United Steel Co., Ltd.: Ribbed Reinforcing Bar, June 1963 p 47
Utility Body Co.: Aerial Ladders, Oct 1963 p 81*

V

Valves:
Automatic Drain; Davies & Metcalfe, Oct 1963 p 81*
Automatic Drain; Westinghouse Brake & Signal Co., Ltd., Dec 1962 p 58*

Valves: (Continued)
Iris Diaphragm: Emile Egger & Co., SA, Aug 1963 p 54
Magnetic, with Encapsulated Coil: Gen. Elec. Co., July 1961 p 49*
Vapor Corp.:
Alertness Control Checks Driver, Aug 1963 p 54*
Circ-U-Latic Watertube Boiler, May 1963 p 50*
Fuel Oil Space Heater, Oct 1963 p 85*
Oil Heaters, Apr 1962 p 50*
Venezuela: Orinoco Mining Co. Installs Hotbox Detectors, Apr 1961 p 38*
Vibrator, Ingersoll-Rand Concrete, Mar 1961 p 44
Viet-Nam Rys.:
Container Service, Mar 1961 p 56*
Equipment Modernization, Mar 1963 p 12*
Vokes Genspring Ltd.: Bellows Joints for High-Temperature Piping, Jan 1961 p 54*
Voltage Regulator: Thomas A. Edison Ind., Oct 1963 p 85*
Von Arx, P., & Co.: Rotary Cleaning Tool, Sept 1962 p 42*
Vossloh-Werke Delta-Clip Rail Fastening, June 1962 p 59*

W

Wagner, Gustav: Rail Saw and Drill, Oct 1963 p 74
Wales: How Steel Company of Wales Uses Diesels, Nov 1962 p 34*
Weed-Killing Compound: Du Pont de Nemours International, SA, Mar 1962 p 54
Weed-Killing Train: Spanish Nat. Rys., Mar 1962 p 58*
Weighbridge, Automatic: German Fed Ry., July 1962 p 48
Welding Equipment and Processes:
Aircomatic CO2 Sprayarc: Airco Co. Inter., June 1961 p 50*
Aluminum Electrode: Air Reduction Co., Dec 1961 p 54
Automatic Profile Welder: Alfred Herbert, Ltd., July 1962 p 50*
Semi-Automatic Spot Welding: General Electric Co., Dec 1961 p 54*
Spot-Welders: Electro Mechan-Heat, Jan 1961 p 54*
Suffolk Iron Foundry Adds to Line, Nov 1961 p 52
Thermoweld: BICC-Bundy, Feb 1963 p 45*
Welder for Tungsten Inert-Gas Process: Saturn Ind. Gasses Ltd., Oct 1960 p 48*
Wenner-Gren B. C. Development Co., Ltd.: Pacific Northern Route Mapped, Jan 1961 p 56*
Werkspoor, N. V.: Prefabricated Plastic Containers, Aug 1963 p 54
Westinghouse Brake & Signal Co., Ltd.: Automatic Drain Valve, Dec 1962 p 58*
Wheel Profiler: British Rys., Feb 1963 p 58*
Wheel-Set Congress Held In Italy, June 1963 p 50
Wheel Slip, Slip-Suppressing Brake to Prevent, on GE U25B Diesel-Electric Locomotives, May 1961 p 48*
Wickham, D., & Co., Ltd.: Rail-Motor Gang Trolley, Apr 1961 p 51*
Wieger Maschinenbau GmbH: Ballast Cleaners, May 1962 p 36*; May 1963 p 50*
Williams, Henry, Ltd.:
Emergency Fish Plates, Mar 1961 p 44
Switch Lever for Narrow-Gage Track, Mar 1961 p 40
Unit-Constructed Control Panels, Nov 1962 p 51*
Witlock, Ets.: Tarpaulins for Freight Cars, Aug 1962 p 42
Wood Treatment Plant, Portable: Osmose Wood Preserving Co., Dec 1963 p 54*
Woolery Machine Co. Snoweeder, Feb 1963 p 45*
Work Study Techniques on British Rys., June 1962 p 42*; July 1963 p 10
World Bank Loans, 1959-60, Oct 1960 p 73; 1960-61, Nov 1961 p 9
World Polls:
Capital Expenditures (See Capital Expenditures)
Containers, Mar 1961 p 14*
Radio, How RRs Use, Apr 1961 p 20; May 1961 p 12
Screw Thread Standards, Jan 1961 p 16; Feb 1961 p 52*
Systems of Measurement, Jan 1961 p 16; Feb 1961 p 52*
Training Programs, July 1961 p 52
What Shippers Think of RRs, June 1961 p 16
World's Longest Tunnel, JNR to Construct, Apr 1963 p 23
Worthington Corp. Refrigeration-Heating System, Oct 1961 p 55*
Wrecking Crane: Cowans, Sheldon & Co., Ltd., Correction, Feb 1962 p 461
Wrench, Ingersoll-Rand Pneumatic, Oct 1960 p 48*

Y

Yards:
British Rys.: Automated Yards, Nov 1961 p 48*
Canadian National, at Montreal, Feb 1962 p 35*
Yokohama Rubber Co., Ltd.: Neoprene Blended Air Springs, May 1963 p 51*
Yugoslavia:
Rail Network Split Into 19 Sections, May 47 1962 p 47
Yugoslav Rys. Aluminum Trainsets, July 1963 p 40*

RAILWAY BOOKSHELF

Auf den Schienen der Erde, Mar 1962 p 53

Balloon Stacks and Sugar Cane, Nov 1962 p 54
Benguela Railway, Aug-Sept 1961 p 52
British Railways Yearbook, Oct 1963 p 99

Canadian Steam, Apr 1962 p 36
Costs—A Tool for Railroad Management, July 1962 p 46

Diesel and Electric Traction on British Railways, Nov 1962 p 54
Down Brakes, July 1962 p 46

En-Essertjes, Feb 1961 p 57

Far Wheels, Feb 1963 p 54
Fiddletown and Copperopolis, Jan 1961 p 19
Fresh Approach to Diesel-Electric Locomotive Design, A, Aug-Sept 1961 p 52

Great Western Railway Museum, Oct 1963 p 99

History of London Transport, Vol. 1-The Nineteenth Century, Aug 1963 p 51
History of the Southern Railway, Oct 1963 p 99
How the Underground Works, Aug 1963 p 51

Introduction of Diesel Traction on the Egyptian Railways, Mar 1961 p 9

Japanese National Railways 1963, July 1963 p 47

Kingdom of Saudi Arabia: Ministry of Communications, Mar 1961 p 9

Last Steam Locomotives of Western Europe, The, Aug 1963 p 51

Materiel Moteur SNCF, Le, Feb 1961 p 57
Modern Railways the World Over, Apr 1962 p 36
Motive Power of the Union Pacific, Dec 1962 p 56

Navolging van de Amerikaanse Vervoerspolitiek en van de Interstate Commerce Commission in de Europese Gemeenschappen, Nov 1961 p 58
New Tokaido Line, The, Mar 1962 p 53
New Zealand's First Railway, Dec 1962 p 56
Nostre Locomotive Elettriche, June 1961 p 58

125 Jahre Deutsche Eisenbahnen, Mar 1961 p 9

Permanent Way in Japan, Mar 1961 p 9
Permanent Way Technique and Permanent Way Economy, Nov 1962 p 54
Permanent Way: The Story of the Kenya & Uganda Railway, Feb 1963 p 54

Quest for Crisis, Apr 1963 p 45; Aug 1963 p 43

Railroads in the Days of Steam, Mar 1962 p 53
Railway Operating Practice, Apr 1962 p 36
Railway Snowfighting Equipment and Methods, Apr 1962 p 36
Railway Steel Topics: Autumn 1960, Mar 1961 p 9
Railways of Britain—An Historical Introduction, Mar 1962 p 53
Railways of Southern Africa, Apr 1963 p 45
Robertson Guide to World Screw Thread Standards, Feb 1961 p 57

Sanson Tramway, The, Feb 1963 p 54
Seven Years of Transport and Communications in the Egyptian Region of the UAR, Aug-Sept 1961 p 52
Steam Locomotives of New Zealand Rys., July 1962 p 46
Steam on the Sierra, Feb 1961 p 57
Stoomlokomotieven der Nederlandse Tramwegen, June 1961 p 58
Storia del Mostro, June 1961 p 58
Story of London's Underground, The, Aug 1963 p 51
Swiss Federal Railways Electrification Completed, Aug-Sept 1961 p 52

Wheels Across America, Mar 1962 p 53
World Railways, 1960, Jan 1961 p 19

PEOPLE IN THE NEWS

[*Indicates Photograph]

Acevedo, Arturo, Nov 1961 p 35*
Alemann, Roberto T., July 1961 p 25*
Andrews, S. C., Apr 1961 p 25*
Arpaia, Anthony F., June 1961 p 25*
Armand, M. Louis, Oct 1963 p 3

Beeching, Richard, May 1961 p 44*
Brady, Kieran, Apr 1961 p 25*
Buchanan, Walter C., Oct 1963 p 3, 39*

Clune, Connor, Apr 1961 p 25*

Deenik, J. F., Mar 1961 p 38
Dunne, Liam, Apr 1961 p 25*

Eisses, J. A., Mar 1961 p 38

Higgins, John, Apr 1961 p 25*

Kourentas, Konstantine, Sept 1962 p 50; Dec 1962 p 50*

Mendez, Don Benjamin, Oct 1963 p 3, p 39*
Murphy, Patrick, Apr 1961 p 25*

Oeftering, Heinz M., Mar 1961 p 33*
Ogueta, Ricardo A., June 1962 p 9
O'Neill, William, Apr 1961 p 25*

Ratter, John, Mar 1961 p 58*

Sogo, Shinji, Jan 1962 p 34*

Walter, Philip, Nov 1962 p 10

Zarzycki, J. M., Mar 1961 p 34*